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PENNSYLVANIA

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FALL 1988

JOB SERVICE

Commonwealth of Pennsylvania
Robert P. Casey, Governor

Department of Labor & Industry

Bureau of Research & Statistics

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF LABOR AND INDUSTRY

ANNUAL PLANNING INFORMATION REPORT

FOR

PENNSYLVANIA

Annual publication containing economic and demographic statistics and analysis for use in planning and administering job development and training programs.

ISSUED: FALL 1988

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P R E F A C E

The Annual Planning Information Report (APIR) is designed to provide basic statistical data and analyses to aid planners who are in need of socioeconomic information, particularly as related to job development and training programs. Users of this report are perceived to be planners and administrators; vocational educators; state and local officials; business, labor and other community groups. The report includes information on employment and unemployment; wages and earnings of production workers in manufacturing; population demographics; job openings received by local offices of Job Service; and occupational employment trends.

The Bureau of Research and Statistics would like to extend its gratitude to the many who have contributed to the state publication: Donald Laughery, Chief, Research and Analysis Division, for overseeing the project; Lance Laird, Supervisor and Florence Mallonee, Technician, LMI Analysis Division, for writing the narrative; James Stone, Supervisor and Jacki Hagmayer, Technician, Special Programs Section, for producing the majority of the tables; William Wentz, Chief and Marianne McCann, Clerk Typist III, Field LMA Administration Division, for their advice and general assistance; and Darene Heaney, Clerk Typist II, Research and Analysis Division, for typing the narrative.

An Annual Planning Information Report is prepared for the State, each Primary Metropolitan Statistical Area (PMSA), and each Metropolitan Statistical Area (MSA). All reports are available by contacting state or area labor market analysts.

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I. HIGHLIGHTS

A. Highlights of the Report

STATE EMBODIES FORTY LABOR MARKET AREAS

Pennsylvania is divided into 67 counties which comprise 40 labor market areas, twelve of which are designated Metropolitan Statistical Areas (MSAs) while three are termed Primary Metropolitan Statistical Areas (PMSAs).

PENNSYLVANIA POPULATION PROJECTED TO GROW

It is projected that Pennsylvania's population will grow to 11,969,000 by 1989, up 104,280 from 1980. Estimated population figures for 1986 place the Commonwealth as the fifth most populated state in the nation. The 1980 census indicates that minorities account for 11.5 percent of the state's population with Blacks the dominant minority comprising 76.7 percent of the total.

MINORITIES AND YOUTH CONTINUE TO FACE EMPLOYMENT PROBLEMS

During 1987 Pennsylvania's labor force averaged 5,648,000. Of this total, 320,000 were out of work and seeking employment yielding a state average unemployment rate of 5.7 percent. Youth 16 to 19 years of age displayed an unemployment rate of 14.5 percent, more than twice the rate for all persons. The total minority group also suffered relatively high levels of joblessness during 1987 with a rate of 9.1 percent.

MANUFACTURING JOBS DECLINE; THOSE IN NONMANUFACTURING CONTINUE TO GROW

Over the 1977-1987 period, Pennsylvania's manufacturing industries lost 270,700 jobs while nonmanufacturing employment soared by 603,000. Durable goods industries bore the brunt of manufacturing losses while, in nonmanufacturing, job gains were concentrated in the service industries, wholesale and retail trade as well as finance, insurance and real estate.

NONAGRICULTURAL EMPLOYMENT EXPECTED TO RISE

Nonagricultural wage and salary employment statewide is expected to reach 5,102,000 by 1995. This represents an increase of 362,900 jobs from 985 as compared with an increase of 300,100 jobs between 1975 and 1985.

COMMONWEALTH PER CAPITA INCOME UP 6.8 PERCENT IN 1987

Dividing total personal income for a year by the state's total resident population yields per capita personal income. During 1987 Pennsylvania's per capita income averaged $15,212 reflecting a rise of 6.8 percent since 1986 and placing the state twentieth among all states in this income statistic. The 1987 United States average was $15,481.

PHILADELPHIA PMSA SHOWS HIGHEST AVERAGE ANNUAL WAGE

At $22,772 in 1987, the Philadelphia PMSA posted the highest average annual wages among the state's 15 Metropolitan Statistical Areas. The Pittsburgh PMSA and Reading MSA followed with wages of $21,018 and $19,979 respectively. These data are based on total payroll of UC-insured workers and federal government employes divided by the total number of employes.

ELECTRIC, GAS AND SANITARY SERVICE POSTS HIGHEST AVERAGE WEEKLY EARNINGS

Production workers in Pennsylvania's electric, gas and sanitary service industries earned an average of $645.64 per week in 1987, highest among manufacturing industries. The average manufacturing emplove in Pennsylvania earned $408.18 per week in 1987.

EMPLOYMENT POTENTIAL HIGH FOR NURSES AND CASHIERS

Based on their ability to generate hiring potential during the 1980s, the occupations of professional nurse and cashier led all others in Pennsylvania. This is not surprising as nurses are found throughout all industries within the expanding health field while cashiers are found in most sales related industries.

NEARLY 186,400 COMPLETE VOCATIONAL EDUCATION PROGRAMS STATEWIDE

During the 1985-86 school year, 186,383 persons completed vocational education programs throughout the Commonwealth. This included 42,742 secondary completers, 137,442 post-secondary and 6,199 adults. Business education was most popular with 66,310 completers.

PUBLIC AND NON-PUBLIC SCHOOL ENROLLMENT CONTINUES TO DECLINE

During the period 1973 through 1988 public school enrollment has declined steadily, down a net 692,743 or 29 percent. Despite two yearly increases during the 16 year period, enrollment among Pennsylvania's non-public schools shows a net loss of 99,089 or 22 percent.

JOB SERVICE FILLS 155,644 JOB OPENINGS

In the twelve-month period ending June 30, 1988, Job Service local offices received a total of 220,601 job openings. Of these, 155,644 were filled. Service occupations comprised the largest group of openings filled. A total of 663,419 applicants registered for work at Job Service offices during the year.

STATE UNEMPLOYMENT LOWEST SINCE 1979

Unemployment among Pennsylvania residents fell to 320,000 during 1987, a drop of 66,000 over the year. This is the lowest number of unemployed since 1979 and represents 5.7 percent of the 1987 civilian labor force.

B. Area Highlights

A NEW DELAWARE RIVER MARINE TERMINAL IS PLANNED IN PHILADELPHIA

A new Delaware River Marine terminal is being planned by Conrail and Agway Corp. The terminal will be designed to import fertilizer ingredients. It has been estimated that the new facility will generate a 3.2 million payroll for 160 jobs in stevedoring, railroad and truck operations.

HAZARDOUS WASTE SERVICES CORPORATION IN CHESTER COUNTY AWARDED A $55 MILLION CONTRACT FROM EPA

Roy F. Weston, Inc., Chester County, was recently awarded a $55 million contract from EPA. The contract is for providing technical assistance on environmental emergencies and hazardous waste removal activities.

THIRTIETH STREET RAILROAD STATION REHABILITATION PLANNED IN PHILADELPHIA

Work has begun on the rehabilitation of the 30th Street Railroad Station. The two and a half year project includes a collection of restaurants and retail shops in the unused concourse area. The project is expected to lead to the development of a 66-acre office-hotel complex north of the station. Cost of the first phase of the project, the rehabilitation of the station itself, is estimated at $75 million.

METROPLEX COMPLEX PLANNED FOR MONTGOMERY COUNTY

Hanson Properties and Associates recently announced plans to build the Metroplex in Plymouth Township, Montgomery County. The $425 million investment will include two office towers, a shopping center, restaurants, and a hotel.

BETHLEHEM STEEL, ALLENTOWN-BETHLEHEM MSA'S LARGEST EMPLOYER SHOWS FIRST PROFIT IN SIX YEARS

The area's largest employer provided some good news as the company turned profitable in 1987, after five painful years of losses. In 1988, Bethlehem, the nation's third-largest steel producer, reported shipments to be the best in six years.

LEHIGH VALLEY INDUSTRIAL PARK EXPANDING RAPIDLY

Sales of building lots at Lehigh Valley Industrial Park IV were going so well in 1988 that Industrial Park officials were concerned that some firms wishing to locate in the park might have to be turned away. When completed, Park IV is expected to create as many as 4,500 jobs.

ALLENTOWN-BETHLEHEM MSA'S POPULATION EXPANDING FASTER THAN THE STATE

By mid-1989, the population of the Pennsylvania portion of the Allentown-Bethlehem MSA is expected to rise to 575,500. The rate of expansion over nine years equals 4.3 percent, much more than the statewide rate of only 0.9 percent. Leading all age groups in growth, the 35-44 year-old bracket has increased by 38.6 percent.

LINCOLN CORPORATE CENTER PLANNED FOR BERKS COUNTY	Lincoln Corporate Center, a new 140-acre light industrial park, is planned for Exeter Township.
AUSTRIAN COMPANY TO LOCATE IN YORK COUNTY	York contractor, Robert A. Kinsley, has reached an agreement with an Austrian manufacturer to build the company's first U.S. plant in York County. Kinsley is planning to build a two-story 78,000 square foot plant on a 32-acre tract along Board Road in Manchester Township for a Ludwig Engel subsidiary, Engel Machinery Inc. Engel KG, based in Schwertburg, Austria, is one of the world's foremost manufacturer of injection-molding machinery. When completed, the plant will initially be used as an assembly plant. Eventually, it will become a full-fledged manufacturing plant employing several hundred people.
PENN STATE UNIVERSITY RANKED HIGH NATIONWIDE IN RESEARCH SPENDING	Penn State ranked 17th in the country last year in research expenditures. According to figures compiled by the National Science Foundation $165.8 million was spent on research by the University in fiscal 1987. As a land-grant University, Penn State conducts research in a wide variety of areas, including: improvement of agricultural crops and products; AIDS and heart disease; industry-sponsored research (in which Penn State ranked third in the country in fiscal 1987); in fields such as engineering and the hard sciences; and Navy funding of acoustical research at the university's Garfield Water Tunnell (Penn State ranked fifth in research funding by the Department of Defense).
ADDITIONAL LODGING IN HERSHEY	Three new lodging facilities are planned for the Hershey area. Comfort Inn, expected to hire 100 people; Days Inn, expected to hire 40 people; and Holiday Inn, which will hire approximately 100 employes, are building facilities in the near future in this booming tourist area.
HARRISBURG INTERNATIONAL AIRPORT BUSINESS CENTER TO BE BUILT	The Harrisburg International Airport Business Center, a 50,000 sq. ft. office complex, will be constructed in phases on Jednota Estates in Lower Swatara Township.
ROADWAY EXPRESS PLANS A MAJOR DISTRIBUTION CENTER WAREHOUSE NEAR HARRISBURG	Roadway Parcel Service, a division of Roadway Express, purchased 85 acres in Fairview Township Industrial Park, off of Interstate 83. Roadway plans on building a warehouse on six acres to be used as a major distribution center for packages bound for central Pennsylvania and Maryland. Construction of the 300,000 sq. ft. warehouse began July 1988 and is scheduled to be operational early in the fall of 1989. The center will initially employ 400 people and 700 by 1996.

VOLKSWAGEN PLANT CLOSES IT DOORS

Volkswagen of America, which opened its New Stanton, Westmoreland County, assembly plant in 1976, closed the facility in July 1988, costing the area 2,500 jobs. Nearly 1.2 million VW Rabbits and Golfs were built at the plant during the 12 years it was in operation.

LABOR SHORTAGES ARE DEVELOPING IN SOME AREAS OF THE STATE

As unemployment declines in Pennsylvania, labor shortages have developed in some areas. For instance, some new employers in the trucking industry who located in the Carlisle area early in 1988 found it difficult to fill the approximately 2,000 new jobs they created because of insufficient local labor. They began recruiting new workers in the higher-unemployment region, including Pittsburgh, and many people in western Pennsylvania moved to the central part of the state to take advantage of these opportunities.

MANUFACTURING CONTINUES TO IMPROVE IN SOUTHWESTERN PENNSYLVANIA

Manufacturers are expected to hire another 2,000 people in southwestern Pennsylvania next year, according to Mellon Bank's chief economist, Norman Robertson. Coupled with a similar increase last year, the back-to-back employment increases will end a nine-year period of decline that saw the loss of 160,000 local manufacturing jobs. Robertson also predicts 12,000 new jobs in nonmanufacturing in 1989. The region's economy will benefit both from efforts to replace older plants and equipment and from efforts to cut the trade deficit by encouraging exports, according to the economist.

THE STEEL INDUSTRY'S REVIVAL IS BEGINNING TO CAUSE INDUSTRY LABOR SHORTAGES

The steel industry's revival has sent steel firms scrambling for qualified technical workers, but they are finding that many people with those skills are no longer interested in working for steel companies, analysts and personnel specialists say. In many cases, the people who once sought careers in steel, either as machinists, engineers, or metallurgists, have gone into other fields such as electronics, computers or alternative materials. "The problem for steel is that we're in the middle of a generation of people who just chose not to enter the steel industry," said John Jacobson, steel analyst for AUS Consultants of Philadelphia. "The industry got hollowed out in the early 1980's when people got laid-off or quit because they didn't see a future in it."

RETAIL TRADE CONTINUES TO GROW IN THE PITTSBURGH AREA

Retail trade continued to grow in the Pittsburgh area in 1988 in terms of both employment and sales. The U.S. Commerce Department announced that this was the second-largest percentage increase in sales in the United States; only the Miami area reported faster sales growth.

PITTSBURGH COMPANIES EXPECT LOCAL ECONOMY TO DO WELL IN 1989

A survey conducted for the Greater Pittsburgh Chamber of Commerce indicates that 76 percent of the 401 companies surveyed expect to be making more money in 1989 than they did this year and only one-fourth of them think a national recession would have an impact on the area. Economists are predicting a cool-off in the national economy but, a big 1989 is predicted locally, big enough that "there will be no recession here," according to Stuart G. Hoffman, chief economist at Pittsburgh National Bank.

CONSTRUCTION HAS BEGUN ON NEW GREATER PITTSBURGH INTERNATIONAL AIRPORT TERMINAL

Construction has begun on the $503 million mid-field terminal at Greater Pittsburgh International Airport. The new facility, slated for completion in 1992, will greatly increase the airport's capacity and stimulate development in Western Allegheny County. The Southwest Pennsylvania Regional Planning Commission has estimated that the new terminal itself will have a $4.4 billion impact on the county over the next twenty years and that business along the airport corridor will add another $990 million and more than 11,000 jobs over the same period.

US AIR CONTINUES TO EXPAND

US Air, the Pittsburgh-based airline which merged with Piedmont Airlines at the end of 1988, has hired almost 2,000 additional employes in the Pittsburgh area in the past 18 months. The company has also ordered 95 planes to expand its fleet.

PITTSBURGH NAMED "AMERICA'S MOST LIVABLE CITY"

Rand McNally's 1985 edition of the Places Rated Almanac picked Pittsburgh out of 377 metropolitan areas nationwide as "America's most livable city," based on such factors as climate, public transportation, cultural recreational activities, the economy, crime rates, education, housing, and others.

II. POPULATION AND LABOR FORCE CHARACTERISTICS AND TRENDS

A. Definition of Area

The Commonwealth of Pennsylvania, the Keystone State, is in the Middle Atlantic Region of the United States and is bordered by six states: New York on the north and northeast; New Jersey on the east; Delaware and Maryland on the south; West Virginia on the south and west; and Ohio on the west. The Delaware River on the east separates the Commonwealth from New Jersey and southeastern New York. In the northwest, Lake Erie provides 51 miles of coastline.

Pennsylvania measures 307 miles by 169 miles at its widest points and has a total land area of 45,333 square miles. The State ranks thirty-third in land area out of the 50 states. The Appalachian Mountain Range crosses Pennsylvania diagonally from northeast to southwest and covers almost three quarters of the entire state. Mount Davis in Somerset County is the highest peak at 3,213 feet.

Pennsylvania's resident population of 11,864,720 for 1980, yields a density of 262 people per square mile and is the home of 5.2 percent of the U.S. population. According to 1980 census data, Pennsylvania's population is 69.3 percent urban and 30.7 percent rural. The Commonwealth is divided into 67 counties which make up 40 labor market areas including 12 Metropolitan Statistical Areas (MSAs) and 3 Primary Metropolitan Statistical Areas (PMSAs). With an estimated 1987 population of 11,936,400, Pennsylvania is the fifth most populated state in the nation.

Pennsylvania has an excellent highway system which provides easy access to major marketing areas and seaports. There are 42,000 miles of state administered paved roads in Pennsylvania, more than in New Jersey and all of New England combined. The Pennsylvania Turnpike, the first turnpike in the U.S., connects the major metropolitan areas of Philadelphia and Pittsburgh.

Farmland comprises one-third, 8.5 million acres, of Pennsylvania's total land. Pennsylvania leads the nation in the production of mushrooms, potato chips, pretzels, and the number of meat slaughter houses and licensed bakeries. The state ranks second in the production of ice cream, sherbet and frozen dairy products, egg-type chickens hatched and poultry processing plants; ranks third in the production of veal, eggs, and layer chickens; ranks fourth in the production of Italian cheese, grapes, silage corn, cut flowers and potted flowering plants. Pennsylvania's milk production ranks fifth in the nation.

Philadelphia, the largest city in Pennsylvania and the fourth largest in the U.S., is rich in the history of the American Revolution. Located on the Delaware River in the southeast section of the state, Philadelphia is the world's largest freshwater port and also a large oil refining center.

Pittsburgh, the state's second largest city, is located in southwestern Pennsylvania where the Allegheny and Monongahela Rivers meet to form the Ohio River. Universally known for its production of steel, Pittsburgh is also the largest inland port in the United States, its goods reaching the Mississippi via the Ohio River.

Erie, situated in the northwest on the shore of the Great Lake of the same name, is the third largest city. Erie has also become an important port, making it a favorable location for industry. The Great Lakes and St. Lawrence Seaway provide an approach to the Atlantic Coast.

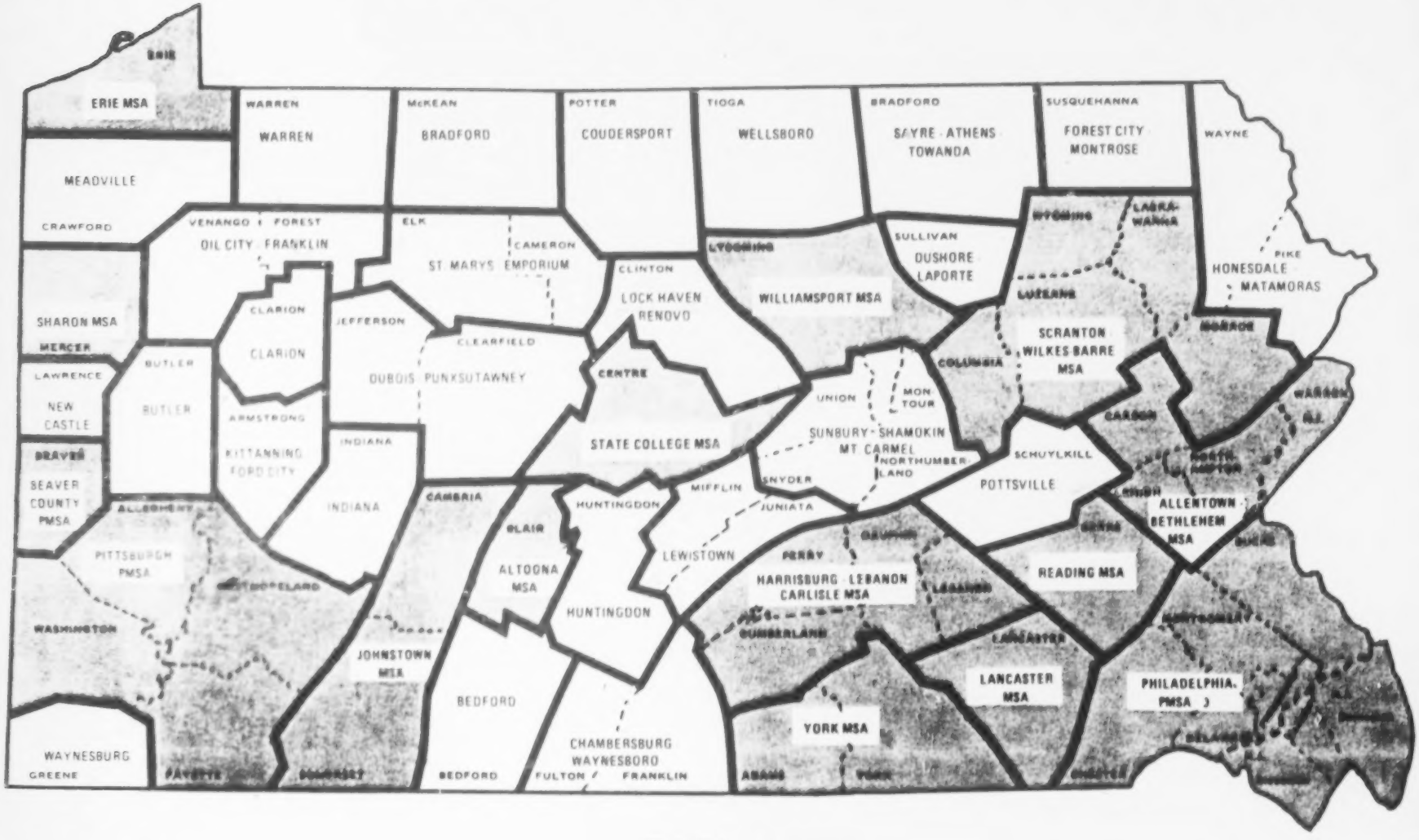
The capital of the state is Harrisburg. Located in south-central Pennsylvania, the capital city is easily accessible by a network of state and interstate highways.

Pennsylvania's economy, like the nation's, is undergoing a structural transition - a major shift from a heavy emphasis on the goods-producing sector (mining, construction and manufacturing) to more emphasis on the service-producing sector. This transition has been taking shape since the 1950s but only in the last decade has it gained momentum, particularly since the 1982-83 recession.

Economies such as Pennsylvania's which have been built on a goods-producing base are more susceptible to the business cycle fluctuations and traditionally suffer greater cutbacks during recession. The more severe the recession, and the 1982-83 recession was as severe as any since the 1930s, the tougher it is to reverse the effects of deep cutbacks. Pennsylvania, nevertheless, has bounced back far better than most people expected. We are becoming a State with a more recession-resistant economy based on a better industrial mix in the goods-producing sector and with more emphasis on the service-producing industries. This transition is led by an increasing demand for information and its timely delivery as well as the rapid growth of advanced technology. It has arrived, as we all now realize, with some pain and sacrifice as the reallocation of resources, especially labor, has hit the western Pennsylvania areas particularly hard. There, unemployment rates remain stubbornly high relative to other areas of the Commonwealth or the nation as a whole. This is true despite the fact that we are in the midst of record-setting economic expansion.

There is much talk of an expanding services sector ultimately contributing to a backward moving economy. An economy where menial, low-paid jobs are the rule of the working class. This thinking is far from the truth as services is rapidly becoming synonymous with information and technology. As for compensation, during recent years, service-producing industry jobs have actually had larger wage increases than the goods-producing sector. In Pennsylvania, the service sector employs a multitude of residents who are classified occupationally in such challenging fields as engineering, computer science, mathematics, accounting, law and health. Throughout the Commonwealth, the service economy is undoubtedly becoming more dynamic, versatile, and knowledge intensive with each passing day.

Labor Market Areas of Pennsylvania



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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF LABOR AND INDUSTRY

MAJOR AREA

MSA - METROPOLITAN STATISTICAL AREA
PMSA - PRIMARY METROPOLITAN STATISTICAL AREA

B. Population Characteristics and Trends

Since 1970 the Commonwealth has had a population shift from urban centers to rural counties--the most current mix, according to the 1980 Census, is 69.3 percent urban and 30.7 percent rural. Most of the population growth took place in the central and south-central portions of the state. Of the 67 counties in the state, 35 have had population gains since 1980. The counties showing the largest population gains were Bucks, Chester, Lancaster, Montgomery and York. Largest population losses were recorded in Allegheny, Philadelphia, Beaver, Westmoreland, and Cambria Counties.

According to Pennsylvania Health Department Vital Statistics, there were 160,336 resident live births in 1986, an increase of 0.2 percent from 1985. Since 1973, 1986 is only the fourth year that the annual number of resident live births for the state exceeded 160,000. The 1986 live birth rate per 1,000 population was 13.5, the same as in 1985 and the highest rate recorded in Pennsylvania since 1982. In 1986, a total of 123,852 Pennsylvania residents died, an increase of 619 or 0.5 percent since 1985. This figure is the highest annual number of deaths since 1973. The crude death rate per 1,000 population remained at 10.4. Only minor fluctuations have occurred in the death rate over the past 40 years. Historically, Pennsylvania's total crude death rates have consistently been higher than those for the United States.

It is projected that Pennsylvania will continue to experience little population growth through 1989 as out-migration consumes nearly all of the natural increase (births minus deaths) each year. Specifically, Commonwealth population will edge upward to 11,969,000 by 1989, a rise of 104,280 or 0.88 percent from 1980. Among the state's 15 major labor market areas depicted in Table 2, the Lancaster MSA is expected to lead all areas and gain over 44,000 residents (+12.27 percent of its population) between 1980 and 1989. Other areas projected to gain residents are the York MSA with a gain of 7.64 percent, Harrisburg-Lebanon-Carlisle MSA (+5.66 percent), Reading MSA (+4.67 percent), State College MSA (+4.29 percent), Allentown-Bethlehem MSA (+4.20 percent), Erie MSA (+1.76 percent), and Philadelphia PMSA (+1.32 percent). All other areas are expected to show population declines with the Beaver County PMSA leading the state in this category with a 6.43 percent loss between 1980 and 1989.

Pennsylvania's projected population by age group indicates the state is moving toward an older society. Population declines concentrated in the 5-to-24 and 45-to-64 age groups indicate that people most likely to leave the state are young people just out of school without families and in search of work, young adults with children, and middle-aged workers. However, population is increasing in the 0-to-4 and 25-to-44 age groups, indicating that the most productive workers (those still young but with some job

experience and seniority) and their families are remaining in the state. The population of people age 65 and over is also increasing, an indication that large numbers of people view Pennsylvania's beauty and cultural offerings in conjunction with strong family heritage and, therefore, choose to remain after retirement. This gives the Keystone State an aging population with important implications for health care and geriatric services.

Population characteristics, depicted in Table 3, reveal that minorities account for 11.5 percent of Pennsylvania's population with Blacks the dominant minority, accounting for 76.7 percent of total. Hispanics, the next most predominant ethnic group in Pennsylvania, account for only 11.3 percent of total minorities. More than 22 percent of the state's population are under 16 years of age. Due to a longer life-span, women outnumber men in Pennsylvania, accounting for 52.1 percent of total residents according to the 1980 census figures. In the under 16 age category, males comprise 51.2 percent of the total while females make up 53.1 percent of all residents 16 years old and over.

TABLE 1

POPULATION OF PENNSYLVANIA COUNTIES
1987, 1980, AND 1970

County	1987 Estimated	1980 Census	1970 Census	Change 1980 to 1987		Change 1970 to 1980	
				Number	Percent	Number	Percent
Pennsylvania	11,936,400	11,864,720	11,800,766	71680	0.6	63954	0.5
Adams	72,200	68,292	56,937	3908	5.7	11355	19.9
Allegheny	1,382,200	1,450,195	1,605,133	-67995	-6.1	-154938	-9.7
Armstrong	79,100	77,788	75,590	1332	1.7	2178	2.9
Beaver	191,000	204,441	208,418	-13441	-6.6	-3977	-1.9
Bedford	47,900	46,784	42,353	1116	2.4	4431	10.5
Berks	324,300	312,509	296,382	11791	3.8	16127	5.4
Blair	131,900	136,621	135,358	-4721	-3.5	1265	0.9
Bradford	64,300	62,919	57,982	1381	2.2	4957	8.6
Bucks	532,000	479,211	416,728	52789	11.0	62483	15.0
Butler	152,400	147,912	127,941	4488	3.0	19971	15.6
Cambria	171,400	183,263	198,785	-11863	-6.5	-3522	-1.9
Cameron	6,400	6,674	7,098	-274	-4.1	-422	-6.0
Carbon	55,200	53,285	50,573	1915	3.6	2712	5.4
Centre	114,600	112,760	99,267	1840	1.6	13493	13.6
Chester	348,800	316,660	277,746	30140	9.5	38914	14.0
Clarion	41,800	43,362	38,414	-1562	-3.6	4948	12.9
Clearfield	81,800	83,578	74,619	-1778	-2.1	8959	12.0
Clinton	37,900	38,971	37,721	-1071	-2.7	1250	3.3
Columbia	60,800	61,967	55,114	-1167	-1.9	6853	12.4
Crawford	86,300	88,869	81,342	-2569	-2.9	7527	9.3
Cumberland	192,100	179,625	158,177	12475	6.9	21448	13.6
Dauphin	238,600	232,317	223,713	6283	2.7	8604	3.8
Delaware	565,500	555,029	603,456	10471	1.9	-48427	-8.0
Elk	37,300	38,338	37,770	-1038	-2.7	568	1.5
Erie	278,700	279,780	263,854	-1080	-0.4	16126	6.1
Fayette	153,100	159,417	154,667	-6317	-4.0	4750	3.1
Forest	4,700	5,072	4,926	-372	-7.3	146	3.0
Franklin	119,500	113,629	100,833	5871	5.2	12796	12.7
Fulton	14,200	12,842	10,776	1358	10.6	2066	19.2
Greene	40,200	40,476	38,090	-276	-0.7	4386	12.2
Huntingdon	42,800	42,253	39,108	547	1.3	3145	8.0
Indiana	92,300	92,281	79,451	19	0.0	12830	16.1
Jefferson	48,000	48,303	43,695	-303	-0.6	4608	10.5
Juniata	20,100	19,188	16,712	912	4.8	2476	14.8
Lackawanna	222,700	227,908	234,504	-5208	-2.3	-6596	-2.8
Lancaster	403,700	362,346	320,079	41354	11.4	42267	13.2
Lawrence	100,800	107,150	107,374	-6350	-5.9	-224	-0.2
Lebanon	113,100	108,582	99,885	4518	4.2	8917	8.9
Lehigh	284,500	272,349	255,304	12151	4.5	17045	6.7
Luzerne	331,800	343,079	341,956	-11279	-3.3	1123	0.3
Lycoming	117,100	118,416	113,296	-1316	-1.1	5120	4.5
McKean	46,600	50,635	51,915	-4035	-8.0	-1280	-2.5
Mercer	123,500	128,299	127,225	-4799	-3.7	1074	0.8
Mifflin	46,500	46,908	45,269	-408	-0.9	1640	3.6
Monroe	67,800	69,409	45,422	18191	26.2	23987	52.9
Montgomery	680,000	643,371	624,080	36629	5.7	19291	3.1
Montour	16,700	16,675	16,508	25	0.1	167	1.0
Northampton	239,100	225,418	214,545	13682	6.1	10873	5.1
Northumberland	98,300	100,381	99,190	-2081	-2.1	1191	1.2
Perry	40,000	35,718	28,615	4282	12.0	7103	24.8
Philadelphia	1,844,900	1,888,210	1,948,998	-43410	-2.8	-261796	-13.4
Pike	24,300	18,271	11,818	6029	33.0	6453	54.6
Potter	17,900	17,728	16,395	174	1.0	1331	8.1
Schuylkill	155,100	160,830	160,089	-5630	-3.4	541	0.3
Snyder	35,700	33,584	29,269	2116	6.3	4315	14.7
Somerset	80,800	81,243	78,037	-443	-0.5	5206	6.8
Sullivan	6,400	6,349	5,991	51	0.8	388	6.5
Susquehanna	40,400	37,876	34,344	2524	6.7	3532	10.3
Tioga	40,700	40,973	39,691	-273	-0.7	1282	3.2
Union	34,700	32,870	28,603	1830	5.6	4267	14.9
Venango	62,200	64,444	62,353	-2244	-3.5	2091	3.4
Warren	45,300	47,449	47,682	-2149	-4.5	-233	-0.5
Washington	210,600	217,074	210,076	-6474	-3.0	6198	2.9
Wayne	38,300	35,237	29,581	4063	11.5	5656	19.1
Westmoreland	379,400	392,184	376,935	-12784	-3.3	15249	4.0
Wyoming	28,000	26,433	19,082	1567	5.9	7351	38.5
York	331,400	312,963	272,903	18437	5.9	40060	14.8

SOURCE: 1987 data are from the U.S. Department of Commerce, 1980 and 1970 are Census data.

TABLE 2

COMPARISON OF POPULATION TOTALS

1980 and 1989

PENNSYLVANIA/MSAs

	Population 1989	Percent of State Total	Change from 1980	
			Net	Percent
PENNSYLVANIA	11,969,000	100.00	104,280	0.88
Allentown-Bethlehem MSA (Pa. Part)	575,500	4.81	23,215	4.20
Altoona MSA	132,400	1.11	- 4,221	- 3.09
Beaver County PMSA	191,300	1.60	-13,141	- 6.43
Erie MSA	284,700	2.38	4,920	1.76
Harrisburg-Lebanon-Carlisle MSA	587,700	4.91	31,458	5.66
Johnstown MSA	253,600	2.12	-10,906	- 4.12
Lancaster MSA	406,800	3.40	44,454	12.27
Philadelphia PMSA (Pa. Part)	3,731,500	31.18	48,791	1.32
Pittsburgh PMSA	2,121,100	17.72	-97,770	- 4.41
Reading MSA	327,100	2.73	14,591	4.67
Scranton--Wilkes-Barre MSA	727,900	6.08	- 896	- 0.12
Sharon MSA	124,800	1.04	- 3499	- 2.73
State College MSA	117,600	0.98	4,840	4.29
Williamsport MSA	113,800	0.95	- 4,616	- 3.90
York MSA	410,400	3.43	29,145	7.64

PENNSYLVANIA

POPULATION BY AGE GROUP

1980 and 1989

Age Group	Population		Change from 1980	
	1980	1989	Net	Percent
0 - 4	747,512	830,296	82,784	11.07
5 - 9	805,209	784,722	- 20,487	- 2.54
10 - 14	931,958	759,855	-172,103	-18.47
15 - 19	1,080,688	812,884	-267,804	-24.78
20 - 24	1,059,891	898,711	-161,180	-15.21
25 - 29	945,119	993,183	48,064	5.09
30 - 34	847,908	992,525	144,617	17.06
35 - 44	1,274,164	1,699,150	424,986	33.35
45 - 54	1,296,106	1,212,234	- 83,872	- 6.47
55 - 59	712,125	569,242	-142,883	-20.06
60 - 64	633,027	609,701	- 23,326	- 3.68
65 - 74	944,133	1,038,022	93,889	9.94
75 and over	586,911	768,475	181,564	30.94
TOTAL	11,864,751	11,969,000	104,249	0.88

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry. 1980 data are Census data.

TABLE 3

PENNSYLVANIA

POPULATION CHARACTERISTICS

1980 Census

SEX/ETHNIC CHARACTERISTIC	NUMBER			VERTICAL PERCENT DISTRIBUTION			HORIZONTAL PERCENT DISTRIBUTION		
	Total	Under 16 Years	16 Years and Over	Total	Under 16 Years	16 Years and Over	Total	Under 16 Years	16 Years and Over
Total	11,864,751	2,694,689	9,170,062	100.00%	100.00%	100.00%	100.00%	22.71%	77.29%
Male	5,683,003	1,378,467	4,304,536	47.90	51.15	46.94	100.00	24.26	75.74
Female	6,181,748	1,316,222	4,865,526	52.10	48.85	53.06	100.00	21.29	78.71
White	10,653,153	2,341,578	8,311,575	89.79	86.90	90.64	100.00	21.98	78.02
Male	5,117,282	1,200,192	3,917,090	43.13	44.54	42.72	100.00	23.45	76.55
Female	5,535,871	1,141,386	4,394,485	46.66	42.36	47.92	100.00	20.62	79.38
Black	1,046,824	294,191	752,633	8.82	10.92	8.21	100.00	28.10	71.90
Male	483,866	148,259	335,607	4.08	5.50	3.66	100.00	30.64	69.36
Female	562,958	145,932	417,026	4.74	5.42	4.55	100.00	25.92	74.08
American Indian, Eskimo, and Aleutian	9,466	2,560	6,906	0.08	0.10	0.08	100.00	27.04	72.96
Male	4,686	1,326	3,360	0.04	0.05	0.04	100.00	28.30	71.70
Female	4,780	1,234	3,546	0.04	0.05	0.04	100.00	25.82	74.20
Asian and Pacific Islander	64,385	19,579	44,806	0.54	0.73	0.49	100.00	30.41	69.59
Male	31,184	9,977	21,207	0.26	0.37	0.23	100.00	31.99	68.01
Female	33,201	9,602	23,599	0.38	0.36	0.26	100.00	28.92	71.08
Other Races	90,923	36,781	54,142	0.77	1.36	0.59	100.00	40.45	59.55
Male	45,985	18,713	27,272	0.39	0.69	0.30	100.00	40.69	59.31
Female	44,938	18,068	26,870	0.38	0.67	0.29	100.00	40.21	59.79
Hispanic	153,965	56,288	97,677	1.30	2.09	1.06	100.00	36.56	63.44
Male	76,532	28,623	47,909	0.65	1.06	0.52	100.00	37.40	62.60
Female	77,433	27,665	49,768	0.65	1.03	0.54	100.00	35.73	64.27
Minority 1/	1,365,563	409,399	956,164	11.51	15.19	10.43	100.00	29.98	70.02
Male	642,253	206,898	435,355	5.41	7.68	4.75	100.00	32.21	67.79
Female	723,310	202,501	520,809	6.10	7.51	5.68	100.00	28.00	72.00

1/ Sum of Black; American Indian, Eskimo, and Aleutian; Asian and Pacific Islander; Other Races; and Hispanic. Some duplication is possible since Hispanic may include nonwhite races.

SOURCE: 1980 Census of Population and Housing, PHC 80-V-40, Pennsylvania.

C. Labor Force Characteristics and Trends

The civilian labor force is the sum of the employed and the unemployed, i.e., those people who are working or who are able and available for work and are actively seeking jobs. The inter-relations of the various groups in and out of the labor force are shown in Chart 1. This chart will answer many of the questions commonly asked about the labor force status of individuals and about the definitions of terms used by the U.S. Department of Labor and all of the state offices of employment security. The chart is a schematic diagram of the questions asked of respondents to the Current Population Survey (CPS) conducted by the U.S. Census Bureau for the U.S. Department of Labor and which is used to determine the unemployment statistics for the United States and the eleven largest industrial states, including Pennsylvania. Among the important points to note are these: (1) that all persons who work are considered to be employed, even if they work only a few hours a week; (2) that persons on vacation, absent from work due to illness, or on strike are considered to be employed; (3) that persons who are not actively seeking work are not in the labor force and therefore are neither employed nor unemployed; and (4) that retirees, homemakers, full-time students, and the disabled are not part of the labor force. It is also important to note that receiving unemployment compensation benefits does not have a bearing on labor force status. A person who exhausts his unemployment benefits or who did not qualify for them and who is actively seeking a job is still considered to be unemployed and is included in the monthly unemployment estimates.

Table 4 gives a civilian labor force profile of Pennsylvania's Metropolitan Statistical Area (the sum of all counties located in MSAs) in comparison with data for the State and Nation. Both the Metropolitan Area and the State as a whole show greater concentrations of males in the labor force than the national average, this due largely to the state's relative concentration of jobs in the durable goods industries where comparatively few women are employed. Pennsylvania also has a lower proportion of nonwhites and a very small proportion of Hispanics in the labor force, an outcome directly related to the population characteristics discussed in the previous section. The proportion of Pennsylvania's labor force unemployed during 1987 was below the national average.

Employment in Pennsylvania's manufacturing sector amounted to 21.2 percent of total nonagricultural employment during 1987 compared with 18.7 percent for the nation. As job volumes in the manufacturing sector have eroded during recent years, nonmanufacturing employment has shown a significant upturn to a point where, during 1987, 78.8 percent of all jobs in Pennsylvania were in nonmanufacturing. Across the nation this figure amounts to 81.3 percent.

Labor force characteristics by sex, age, race, and veteran status are given in Table 5. The Commonwealth's 1987 annual average labor force was 5,648,000. Of this total 5,328,000 were employed while 320,000 were unemployed yielding a 1987 average unemployment rate of 5.7 percent. Whites represented 91.9 percent of the labor force and possessed a 5.2 percent unemployment rate. Blacks, although representing just 7.1 percent of the total labor force, had an unemployment rate of 10.9 percent. Similarly, youths 16 to 19 years of age represented only 6.3 percent of the labor force but displayed an unemployment rate of 14.5 percent. Youths 20 to 21 years old represented a smaller share of the labor force, 4.4 percent, with an unemployment rate of 9.7 percent. Varying unemployment rates between youth groups can be partially explained by the younger group having less skill and training and much less commitment to the job market. The state rate of unemployment for all females was 5.2 percent in 1987, five-tenths of a percentage point below the rate for all persons. For black women the rate was 9.3 percent while white women showed 4.8 percent. The Vietnam-Era veterans' unemployment rate in 1987 was 4.2 percent. They represented 6.2 percent of the labor force and 4.7 percent of the total unemployed.

Tables 6 through 10 contain resident data for 1987 by county for a number of selected constituent groups: whites, nonwhites, males, females, youth, Vietnam-Era veterans, and total veterans. Statewide, the nonwhite unemployment rate in 1987 was over twice the white rate. In 50 of Pennsylvania's 67 counties women had lower unemployment rates than men in 1987. In general, in all counties young people suffered higher unemployment rates than the overall labor force, while veterans had below average jobless rates. Further county specific statistics can be found in the tables that follow this narrative.

Reflecting upon the various charts and tables contained in this section, a few paragraphs of summation...where we've been and were we're going...appear to be in order.

Obviously, Pennsylvania's blue-collar worker and the industries he serves continue to face problems. Old-line manufacturing industries such as steel, textiles, fabricated metal products and nonelectrical machinery--once the state economy's backbone--are providing a smaller share of the state's employment. The old industrial base is eroding. Routine procedures of production are now implemented more cheaply in the third world counties. To survive, the blue-collar worker often must change shirts and learn the skills of the service economy. This is no easy task, at least for people who have spent their lives making things. Affected are not only the workers, but also their unions and the companies they serve. Involved, too, are investors, concerned about monetary decisions as they relate to industry, and the schools and their students who have to choose future vocations.

As previously mentioned, Pennsylvania has been weathering the same restructuring of the labor force as the nation, but in even greater dimensions. In the early 1950s when 5 of every 10 jobs were in the goods-producing industries, Pennsylvania's economy was based primarily on manufacturing and mining. Today, the goods-producing sector represents less than 3 out of every 10 jobs while the service-producing sector has continued to grow, becoming the major source of jobs in the State.

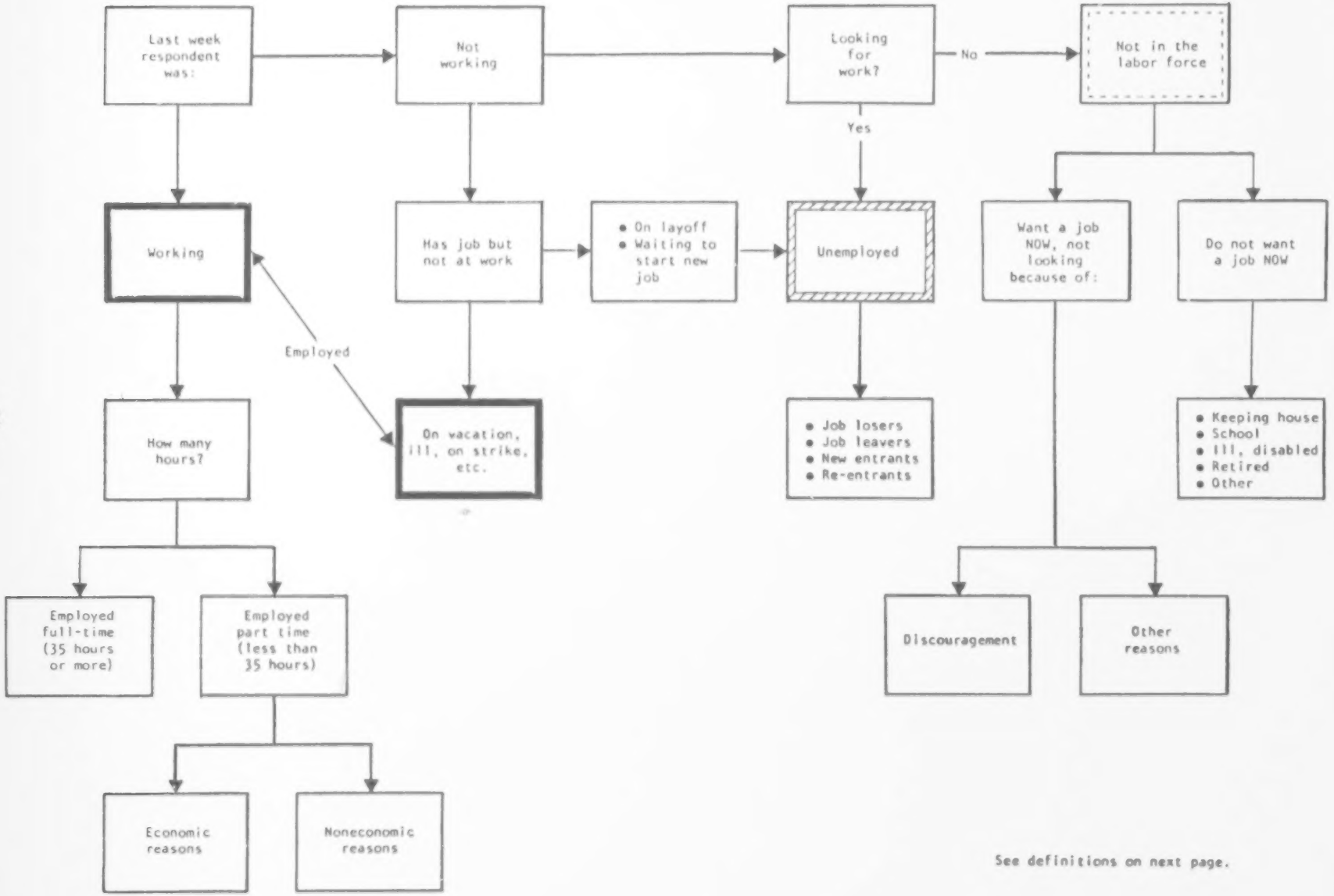
Among the factors that have contributed to employment gains in service-producing industries are rising incomes and living standards; an aging population with a greater demand for health care; increased entertainment and leisure activities; and business and financial services. Additionally, many services involve personal contact, thus, fewer jobs are being replaced by machines, in contrast to the goods-producing industries where automation continues to take its toll on jobs. The increase in the participation of women in the labor force has also contributed to the increase of jobs in the service-producing sector where the percentage of women working is high. Traditional service occupations with below-average pay will experience declining demand in the future; in particular, clerical workers, hand bookkeepers, stenographers, and telephone operators. A study by Carnegie-Mellon University predicts by the year 2000 robots will replace three million factory workers nationwide, and they will be handling nearly all manufacturing chores by the year 2025. Forecasting International projects manufacturing jobs will fall more than 50 percent, so that by the year 2000 only 11 percent of the work force will be employed in smokestack industries.

Where are the jobs of tomorrow? Occupations that are projected to grow fastest in this decade and have the greatest number of openings are not necessarily concentrated in advanced technology industries. To the contrary, the expansion of the lowest skill jobs in the American economy will vastly outstrip the growth of advanced technology jobs. For Pennsylvania, projected annual average openings through the mid-'90s for computer systems analysts, computer operators and computer programmers are 2,500. However, over 13,100 annual openings are projected for janitors and cleaners. During the same time frame over 6,800 annual openings are projected for secretaries, 11,700 for sales clerks, 3,000 for food preparation workers, and 8,800 for mechanics, installers and repairers. More extensive information is available in Pennsylvania Occupational Trends and Outlook, published by the Pennsylvania Department of Labor and Industry.

According to the American Society for Training and Development it was the aging of the post-World War II "baby boom" generation, in combination with dramatic increases in the number of women who entered the paid labor force, that laid much of the groundwork for the joblessness that persisted for most of this decade. Although the economy churned out 20 million additional jobs in the 1970s, it was overrun by 24 million new job applicants. Through the mid-1990s the chief cause of labor force growth will be the continued rise in the number of women who seek jobs. Women will account for nearly two-thirds of the labor force growth during the next ten years. The percentage of Pennsylvania's women 16 years and over in the labor force during 1987 was 49.7 percent. During 1987 women comprised 44.1 percent of the civilian labor force.

CHART 1

STATUS OF THE LABOR FORCE



See definitions on next page.

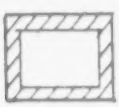
CHART 1

STATUS OF THE LABOR FORCE

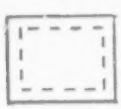
DEFINITIONS

Employed - Employed persons comprise (a) all of those who during the survey week (the week including the 12th of the month) did any work at all as paid employees or worked 15 hours or more as unpaid workers in a family-operated enterprise: (b) all those who were not working but who had jobs or businesses from which they were temporarily absent for personal or noneconomic reasons.

Unemployed - Unemployed persons comprise all those who did not work during the survey, who made specific efforts to find a job within the past four weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who were available for work, and (a) were waiting to be called back to a job from which they had been laid off, or (b) were waiting to report to a new wage or salary job within 30 days.



Not in the Labor Force - Not in the labor force includes all civilians 16 years and over who are neither employed nor unemployed.



SOURCE: U.S. Department of Labor, Bureau of Labor Statistics

TABLE 4

METROPOLITAN AREA / PENNSYLVANIA / UNITED STATES

CIVILIAN LABOR FORCE PROFILE

(PERCENT DISTRIBUTION OF 1987 ANNUAL AVERAGES)

WHO THEY ARE: CHARACTERISTICS OF THE CIVILIAN LABOR FORCE

	Metropolitan Area *	Pennsylvania	United States
Total	100.0%	100.0%	100.0%
Male	55.5	55.9	55.2
Female	44.5	44.1	44.8
16-19 yrs., both sexes	6.2	6.3	6.7
20-21 yrs., both sexes	4.3	4.4	NA
20-24 yrs., both sexes	NA	11.5	12.5
25-44 yrs., both sexes	NA	51.6	53.1
45 yrs. & over, both sexes	NA	30.5	27.7
White	90.7	91.9	86.2
Male	50.4	51.9	48.2
Female	40.3	40.1	38.0
Nonwhite	9.3	8.1	13.8
Male	5.2	4.0	7.0
Female	4.1	4.0	6.8
Hispanic	1.3	1.1	7.1
Male	0.8	0.7	4.3
Female	0.5	0.5	2.8
Vietnam-Era Veterans	5.6	6.2	6.0
At Work	94.6	94.3	93.8
Unemployed	5.4	5.7	6.2

WHERE THEY WORK: INDUSTRY EMPLOYMENT

	Metropolitan Area *	Pennsylvania	United States
Total Nonagr. Wage & Salary	100.0%	100.0%	100.0%
Manufacturing	20.5	21.2	18.7
Durable goods	11.5	12.0	11.0
Primary metal industries	1.8	1.8	0.7
Machinery, excl. electrical	1.8	2.1	2.0
Other durable goods	8.0	8.1	8.3
Nondurable goods	8.9	9.2	7.7
Apparel & other textile prods.	1.5	1.8	1.1
Food & kindred products	1.9	1.8	1.6
Other nondurable goods	5.5	5.6	5.0
Nonmanufacturing	79.5	78.8	81.3
Mining	0.3	0.6	0.7
Contract construction	4.7	4.5	4.9
Transportation & public utilities	5.0	5.0	5.3
Wholesale trade	5.7	5.4	5.7
Retail trade	17.4	17.5	17.9
Finance, insurance, & real estate	6.3	5.9	6.5
Services & miscellaneous	26.7	25.9	23.6
Government	13.5	13.9	16.7
Federal government	2.9	2.9	2.9
State & local government	10.6	11.1	13.8

* METROPOLITAN AREA is the sum of all Pennsylvania Counties located in Metropolitan Statistical Areas (MSAs).

NA - Not Available

SOURCES: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry. Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March, 1988.

TABLE 5

PENNSYLVANIA LABOR FORCE CHARACTERISTICS
EMPLOYMENT AND UNEMPLOYMENT BY SEX, AGE, MINORITY, AND VETERAN STATUS

Annual Average 1987

Sex, Age, Minority and Veteran Status	Labor Force	Employed	Unemployed	Percent Distribution			Unemploy. Rate 4/
				Labor Force	Emp.	Une.	
Both Sexes							
Total	5,648,000	5,328,000	320,000	100.00	100.00	100.00	5.7%
White	5,193,000	4,921,000	272,000	91.94	92.36	85.00	5.2
Black	398,000	355,000	43,000	7.05	6.66	13.44	10.9
Other Races	57,000	52,000	5,000	1.01	0.98	1.56	8.8
Hispanic 1/	64,000	59,000	5,000	1.13	1.11	1.56	7.9
Minority Group 2/	519,000	466,000	53,000	9.19	8.75	16.56	10.2
Total Veteran	952,000	908,000	44,000	16.86	17.04	13.75	4.6
Vietnam-Era Veteran 3/	349,000	334,000	15,000	6.18	6.27	4.69	4.2
Age							
16 to 19 years	358,000	306,000	52,000	6.34	5.74	16.25	14.5
20 to 21 years	248,000	224,000	24,000	4.39	4.20	7.50	9.7
Female							
Total	2,489,000	2,359,000	130,000	100.00	100.00	100.00	5.2
Percent of both sexes	44.07	44.28	40.63	---	---	---	---
White	2,263,000	2,154,000	109,000	90.92	91.31	83.85	4.8
Black	204,000	185,000	19,000	8.20	7.84	14.62	9.3
Other Races	22,000	20,000	2,000	0.88	0.85	1.54	9.1
Hispanic 1/	26,000	24,000	2,000	1.04	1.02	1.54	7.2
Minority Group 2/	252,000	229,000	23,000	10.12	9.71	17.69	9.1

1/ Hispanic persons are of Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin.
2/ Sum of black, other races, & Hispanic. Some duplication is possible since Hispanics may include nonwhite races.
3/ Vietnam-Era veterans are those who served between August 5, 1964 and May 7, 1975.
4/ Unemployment rates calculated from unrounded data.

All data are on 1987 benchmarks.
Items may not add to totals due to rounding.
SOURCE: Current Population Survey, U.S. Department of Labor, Bureau of Labor Statistics.

TABLE 6

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA FOR WHITE AND NONWHITE PERSONS
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1987

COUNTY	WHITE				NONWHITE			
	Labor Force	Employment	Unemployment	Rate	Labor Force	Employment	Unemployment	Rate
Adams	36,300	34,700	1,600	4.4	450	350	100	24.4
Allegheny	574,100	543,800	30,300	5.3	56,550	50,050	6,500	11.5
Armstrong	27,600	25,000	2,600	9.4	350	300	50	16.8
Beaver	58,200	52,600	5,550	9.6	4,250	3,700	550	12.4
Bedford	20,200	18,550	1,600	8.0	100	100	1/	17.3
Berks	164,350	157,250	7,100	4.3	5,700	4,450	1,250	21.7
Blair	58,300	54,200	4,100	7.1	450	350	100	21.0
Bradford	29,100	27,500	1,600	5.5	100	100	1/	13.8
Bucks	279,350	269,050	10,300	3.7	6,850	6,150	700	10.1
Butler	68,100	63,750	4,350	6.4	550	450	100	16.2
Cambria	60,750	56,000	4,700	7.8	1,400	1,150	300	20.4
Cameron	2,550	2,400	150	6.7	1/	1/	1/	2/
Carbon	24,300	22,500	1,800	7.4	100	50	1/	16.1
Centre	58,600	55,450	3,150	5.4	1,000	850	150	13.1
Chester	173,350	168,600	4,750	2.7	11,400	10,450	950	8.2
Clarion	17,100	15,500	1,600	9.4	150	150	1/	15.9
Clearfield	34,400	31,050	3,350	9.7	200	200	1/	11.4
Clinton	15,500	14,100	1,400	9.0	150	150	1/	8.5
Columbia	30,800	28,650	2,150	7.0	150	100	50	25.9
Crawford	37,550	34,600	2,950	7.9	550	450	100	20.2
Cumberland	101,250	98,300	2,950	2.9	1,600	1,350	250	16.7
Dauphin	113,550	110,200	3,350	3.0	15,350	12,550	2,800	18.3
Delaware	271,150	262,550	8,600	3.2	21,350	18,850	2,500	11.8
Elk	16,400	15,300	1,150	6.9	50	1/	1/	2/
Erie	121,900	113,900	8,000	6.6	5,350	4,150	1,200	22.3
Fayette	55,850	50,200	5,600	10.0	1,750	1,500	250	13.1
Forest	1,900	1,700	200	10.3	1/	1/	1/	2/
Franklin	52,000	49,700	2,300	4.4	1,300	1,050	200	17.2
Fulton	5,600	5,150	450	7.9	50	50	1/	2/
Greene	13,000	11,300	1,700	13.1	150	150	50	21.9
Huntingdon	17,300	15,650	1,650	9.4	250	200	100	34.0
Indiana	34,900	31,700	3,200	9.1	450	350	100	20.0
Jefferson	20,000	18,350	1,650	8.3	50	50	1/	13.7
Juniata	9,250	8,550	700	7.5	1/	1/	1/	2/
Lackawanna	105,200	98,750	6,450	6.1	750	600	150	20.2
Lancaster	205,050	197,900	7,150	3.5	5,900	4,950	1,000	16.5
Lawrence	43,250	40,550	2,700	6.2	1,250	1,000	250	19.0
Lebanon	59,850	57,600	2,250	3.8	600	450	100	20.2
Lehigh	140,100	134,050	6,050	4.3	3,400	2,650	750	22.7
Luzerne	155,300	143,050	12,200	7.9	1,000	700	300	28.8
Lycoming	57,050	54,000	3,050	5.4	900	750	200	19.4
McKean	20,600	19,050	1,550	7.4	100	100	1/	15.0
Mercer	46,450	43,550	2,900	6.3	2,250	1,850	350	16.1
Mifflin	20,350	18,750	1,600	7.9	100	50	1/	12.2
Monroe	40,800	39,100	1,750	4.2	600	500	100	17.1
Montgomery	361,950	351,000	11,000	3.0	16,400	14,750	1,650	10.1
Montour	7,750	7,350	400	5.0	50	50	1/	2/
Northampton	108,650	103,350	5,300	4.9	2,800	2,150	650	22.8
Northumberland	46,600	43,000	3,600	7.7	150	100	50	21.0
Perry	19,200	18,200	1,000	5.2	50	50	1/	2/
Philadelphia	417,000	402,250	14,750	3.5	269,000	246,750	22,250	8.3 3/
Pike	10,600	10,150	500	4.6	50	50	1/	21.7
Potter	7,650	7,100	500	6.8	50	50	1/	8.5
Schuylkill	70,600	65,550	5,000	7.1	300	250	50	14.3
Snyder	17,300	16,600	700	4.0	50	50	1/	29.0
Somerset	31,350	28,600	2,750	8.7	100	100	1/	17.2
Sullivan	2,850	2,750	150	4.7	1/	1/	1/	2/
Susquehanna	17,400	16,200	1,200	7.0	100	50	1/	14.6
Tioga	17,700	16,550	1,100	6.3	100	50	1/	24.4
Union	15,750	15,100	700	4.4	150	100	50	23.5
Venango	25,400	23,400	2,000	7.9	200	150	50	17.5
Warren	21,250	19,950	1,350	6.3	50	50	1/	17.6
Washington	87,700	81,000	6,700	7.6	2,600	2,250	400	14.6
Wayne	19,050	17,950	1,100	5.7	50	50	1/	2/
Westmoreland	165,550	152,200	13,350	8.1	2,850	2,450	400	13.3
Wyoming	12,750	11,800	950	7.3	50	50	1/	13.0
York	166,900	159,950	6,950	4.2	4,850	4,000	850	17.3
PENNSYLVANIA	5,193,000	4,921,000	272,000	5.2	455,000	407,000	48,000	10.5

See footnotes on next page.

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA FOR WHITE AND NONWHITE PERSONS
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1987

FOOTNOTES

1/ Less than 25.

2/ Accurate unemployment rate is not available.

3/ Philadelphia County data are obtained directly from the Current Population Survey. The use of this data means that the sum of all the counties may not add to the state totals for White and Nonwhite.

Data are rounded to the nearest 50.

Data are based on the 1987 benchmark.

The rate of unemployment is computed using unrounded data.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 7

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA BY SEX
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1987

COUNTY	MALE				FEMALE			
	Labor Force	Employment	Unemployment	Rate	Labor Force	Employment	Unemployment	Rate
Adams	20,200	19,350	850	4.2	16,600	15,700	850	5.2
Allegheny	352,850	329,950	22,900	6.5	277,800	263,900	13,900	5.0
Armstrong	17,300	15,550	1,750	10.2	10,650	9,750	900	8.3
Beaver	37,700	33,550	4,150	11.0	24,750	22,800	1,950	7.9
Bedford	12,300	11,250	1,050	8.6	7,950	7,400	550	7.2
Berks	93,650	89,000	4,650	5.0	76,400	72,700	3,700	4.8
Blair	33,250	30,800	2,450	7.4	25,550	23,750	1,800	7.0
Bradford	16,950	16,000	900	5.4	12,300	11,600	700	5.7
Bucks	163,450	157,450	6,000	3.7	122,750	117,800	4,950	4.0
Butler	40,750	37,900	2,850	7.0	27,900	26,350	1,550	5.6
Cambria	37,200	33,900	3,300	8.9	24,950	23,200	1,700	6.9
Cameron	1,450	1,300	100	7.8	1,150	1,100	50	5.4
Carbon	13,850	12,850	1,000	7.1	10,550	9,700	850	7.8
Centre	32,550	30,750	1,800	5.6	27,050	25,550	1,450	5.4
Chester	104,100	101,000	3,050	2.9	80,650	78,050	2,600	3.2
Clarion	10,550	9,450	1,050	10.2	6,700	6,150	550	8.5
Clearfield	20,500	18,350	2,150	10.5	14,100	12,900	1,200	8.5
Clinton	8,850	8,000	900	9.9	6,750	6,250	500	7.7
Columbia	16,950	15,750	1,200	7.1	14,000	13,000	1,000	7.1
Crawford	22,050	20,100	1,950	8.8	16,100	14,950	1,150	7.1
Cumberland	55,750	54,050	1,700	3.1	47,100	45,550	1,550	3.3
Dauphin	68,100	64,550	3,550	5.2	60,800	58,200	2,600	4.3
Delaware	161,200	154,800	6,400	4.0	131,350	126,650	4,700	3.6
Elk	9,550	8,800	700	7.6	6,900	6,500	400	6.0
Erie	71,500	65,700	5,800	8.1	55,800	52,400	3,400	6.1
Fayette	36,200	32,150	4,050	11.2	21,400	19,600	1,800	8.3
Forest	1,100	1,000	150	11.3	800	700	50	9.0
Franklin	29,800	28,500	1,350	4.4	23,500	22,300	1,200	5.1
Fulton	3,350	3,050	250	6.1	2,250	2,100	200	7.8
Greene	8,300	7,050	1,250	15.0	4,850	4,350	500	10.2
Huntingdon	10,050	8,950	1,100	10.9	7,500	6,900	650	8.3
Indiana	21,250	19,150	2,100	9.8	14,100	12,900	1,200	8.5
Jefferson	12,000	10,900	1,100	9.3	8,050	7,550	550	6.7
Juniata	5,500	5,000	500	8.8	3,750	3,550	200	5.6
Lackawanna	58,150	54,300	3,850	6.7	47,800	45,050	2,750	5.7
Lancaster	117,750	113,600	4,150	3.5	93,250	89,250	4,000	4.3
Lawrence	26,750	24,800	1,950	7.2	17,750	16,800	1,000	5.6
Lebanon	33,150	31,800	1,350	4.0	27,300	26,250	1,050	3.8
Lehigh	79,050	75,250	3,800	4.8	64,450	61,450	3,050	4.7
Luzerne	85,650	78,500	7,100	8.3	70,650	65,300	5,400	7.6
Lycoming	32,150	30,150	2,000	6.2	25,800	24,550	1,250	4.9
McKean	11,750	10,800	950	8.0	8,950	8,350	600	6.9
Mercer	28,950	26,850	2,100	7.3	19,750	18,600	1,200	6.0
Mifflin	11,750	10,850	900	7.6	8,700	7,950	750	8.4
Monroe	23,000	22,050	950	4.2	18,450	17,550	900	4.7
Montgomery	207,250	200,300	6,950	3.4	171,100	165,400	5,650	3.3
Montour	4,300	4,050	200	5.2	3,500	3,350	150	4.8
Northampton	62,950	59,750	3,200	5.1	48,500	45,750	2,750	5.6
Northumberland	26,400	24,300	2,100	7.9	20,300	18,800	1,500	7.5
Perry	11,250	10,700	600	5.2	8,000	7,550	400	5.3
Philadelphia	356,000	334,000	22,000	6.2	330,000	314,000	15,000	4.6 1/
Pike	6,150	5,850	250	4.4	4,550	4,300	250	5.1
Potter	4,550	4,250	350	7.4	3,100	2,950	200	5.9
Schuylkill	39,550	36,500	3,050	7.7	31,350	29,350	2,000	6.4
Snyder	9,850	9,450	400	4.1	7,500	7,200	300	4.1
Somerset	18,950	17,150	1,850	9.7	12,500	11,550	900	7.4
Sullivan	1,700	1,600	100	4.9	1,200	1,150	50	4.4
Susquehanna	10,250	9,500	750	7.2	7,200	6,750	500	6.9
Tioga	10,200	9,500	650	6.5	7,600	7,100	500	6.3
Union	8,800	8,400	400	4.5	7,100	6,800	300	4.5
Venango	15,050	13,700	1,350	9.1	10,550	9,900	650	6.3
Warren	12,150	11,250	900	7.3	9,200	8,750	450	5.0
Washington	54,600	49,800	4,850	8.9	35,700	33,450	2,200	6.2
Wayne	11,050	10,400	650	5.9	8,050	7,600	450	5.5
Westmoreland	101,200	92,050	9,150	9.0	67,250	62,650	4,600	6.8
Wyoming	7,600	7,050	550	7.5	5,200	4,800	350	7.1
York	96,200	92,050	4,200	4.4	75,550	71,950	3,600	4.8
PENNSYLVANIA	3,159,000	2,969,000	190,000	6.0	2,489,000	2,359,000	130,000	5.2

1/ Philadelphia County data are obtained directly from the Current Population Survey. The use of this data means that the sum of all the counties may not add to the state totals.

Data are rounded to the nearest 50. Rate computed using unrounded data.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 8
PENNSYLVANIA

CIVILIAN LABOR FORCE DATA FOR 16-19 AND 20-21 YEAR OLDS
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1987

COUNTY	16-19 YEAR OLDS				20-21 YEAR OLDS			
	Labor Force	Employment	Unemployment	Rate	Labor Force	Employment	Unemployment	Rate
Adams	2,250	1,775	475	21.1	1,475	1,350	125	8.7
Allegheny	38,950	34,775	4,200	10.8	27,700	25,125	2,575	9.3
Armstrong	2,350	2,100	250	11.0	1,550	1,375	175	11.8
Beaver	6,000	5,475	525	8.6	4,200	3,825	375	9.0
Bedford	1,525	1,225	275	17.5	1,025	900	125	13.0
Berks	8,825	7,525	1,300	14.8	6,125	5,525	600	9.6
Blair	4,150	3,525	625	15.1	2,775	2,400	375	13.6
Bradford	2,200	1,825	375	17.3	1,500	1,350	150	10.0
Bucks	16,500	14,275	2,225	13.5	11,075	10,275	775	7.1
Butler	4,850	4,100	725	15.2	3,250	2,875	375	11.8
Cambria	5,475	4,800	675	12.5	3,700	3,300	400	10.6
Cameron	200	150	25	17.6	150	125	25	10.3
Carbon	1,525	1,275	250	17.0	1,075	950	125	11.8
Centre	6,350	5,075	1,250	19.8	6,925	6,550	375	5.3
Chester	10,550	9,150	1,400	13.2	7,075	6,625	450	6.4
Clarion	2,125	1,800	325	15.8	1,650	1,500	150	9.7
Clearfield	2,750	2,300	450	16.2	1,850	1,550	325	17.1
Clinton	1,125	950	175	15.6	750	625	125	17.3
Columbia	1,775	1,425	350	19.3	1,225	1,025	200	15.6
Crawford	2,900	2,450	450	15.7	1,975	1,750	225	11.7
Cumberland	5,225	4,325	900	17.4	3,550	3,300	250	7.0
Dauphin	6,875	5,800	1,075	15.6	4,500	4,125	375	8.5
Delaware	15,700	13,175	2,500	16.0	11,175	10,350	850	7.5
Elk	1,325	1,125	200	15.9	900	800	100	11.8
Erie	9,000	7,550	1,450	16.0	5,875	5,050	800	13.6
Fayette	5,025	4,450	575	11.4	3,425	3,075	350	10.5
Forest	150	125	25	13.7	100	100	1/	10.9
Franklin	3,700	3,100	600	15.9	2,375	2,150	225	9.3
Fulton	425	375	75	15.1	300	275	25	9.9
Greene	1,275	1,150	150	11.4	900	775	100	12.3
Huntingdon	1,350	1,100	250	18.0	875	750	150	16.2
Indiana	4,575	3,825	750	16.3	3,600	3,250	350	9.6
Jefferson	1,475	1,200	275	18.1	975	800	175	17.8
Juniata	600	500	125	19.1	400	325	75	17.2
Lackawanna	6,275	5,350	925	14.6	4,300	3,750	575	13.1
Lancaster	11,175	9,250	1,925	17.2	7,225	6,675	550	7.5
Lawrence	3,100	2,700	400	12.9	2,000	1,775	225	11.1
Lebanon	3,250	2,725	500	15.7	2,200	2,025	200	8.5
Lehigh	7,575	6,550	1,025	13.5	5,175	4,700	475	9.2
Luzerne	9,600	8,100	1,475	15.5	6,550	5,650	900	13.8
Lycoming	3,625	3,050	600	16.3	2,375	2,100	275	11.7
McKean	1,700	1,450	250	14.6	1,125	975	150	12.9
Mercer	3,775	3,350	450	11.7	2,650	2,425	250	9.0
Mifflin	1,575	1,275	300	18.6	1,075	900	175	16.2
Monroe	2,050	1,775	275	13.6	1,350	1,225	150	10.3
Montgomery	18,850	16,100	2,750	14.6	13,125	12,100	1,025	7.7
Montour	475	400	50	12.0	325	300	50	11.7
Northampton	6,525	5,550	975	15.0	4,450	4,075	375	8.4
Northumberland	2,875	2,500	400	13.6	2,025	1,775	250	12.3
Perry	1,250	1,075	175	13.2	800	725	75	8.0
Philadelphia	48,625	40,850	7,775	16.0	33,450	30,350	3,100	9.3
Pike	500	400	100	18.4	350	325	25	9.8
Potter	625	525	100	17.5	400	375	50	10.8
Schuylkill	4,475	3,825	650	14.4	3,175	2,775	400	12.5
Snyder	1,050	875	175	16.4	700	625	75	10.2
Somerset	2,500	2,175	325	12.7	1,625	1,425	200	12.6
Sullivan	175	175	25	9.8	125	125	1/	7.1
Susquehanna	1,300	1,075	225	17.6	850	750	100	12.2
Tioga	1,375	1,150	200	15.2	925	825	100	10.6
Union	950	775	175	18.3	625	550	75	11.4
Venango	1,950	1,650	300	15.5	1,375	1,225	150	11.0
Warren	1,475	1,250	250	16.3	1,000	900	100	10.6
Washington	6,400	5,775	625	9.8	4,275	3,825	425	10.2
Wayne	1,125	900	225	20.0	775	675	100	11.7
Westmoreland	12,000	10,650	1,350	11.2	8,350	7,475	875	10.6
Wyoming	950	850	125	12.2	575	500	75	12.1
York	10,100	8,350	1,775	17.5	6,425	5,800	625	9.7
PENNSYLVANIA	358,000	306,000	52,000	14.5	248,000	224,000	24,000	9.7

1/ Data less than 25 Data rounded to nearest 25 Rate computed using unrounded data
SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 9

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA BY COUNTY OF RESIDENCE
FOR VIETNAM-ERA VETERANS

1987 ANNUAL AVERAGE

COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)	COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)
Adams	1,900	1,825	50	3.3	Lancaster	10,850	10,575	275	2.6
Allegheny	38,175	36,325	1,825	4.8	Lawrence	2,825	2,700	125	4.6
Armstrong	2,700	2,525	175	6.6	Lebanon	3,450	3,375	100	2.7
Beaver	5,325	4,900	425	8.1	Lehigh	9,625	9,300	325	3.3
Bedford	1,200	1,125	75	5.6	Luzerne	11,100	10,475	625	5.6
Berks	10,100	9,775	350	3.4	Lycoming	3,650	3,500	150	3.9
Blair	4,025	3,825	200	5.1	McKean	1,375	1,300	75	5.3
Bradford	1,950	1,875	75	3.9	Mercer	3,625	3,450	175	4.7
Bucks	18,400	17,875	500	2.8	Mifflin	1,250	1,175	75	5.5
Butler	5,200	4,950	225	4.5	Monroe	2,925	2,850	100	3.1
Cambria	5,125	4,850	300	5.7	Montgomery	20,450	19,950	500	2.4
Cameron	200	200	1/	4.7	Montour	475	450	25	3.5
Carbon	1,875	1,775	100	5.2	Northampton	7,675	7,400	275	3.7
Centre	3,425	3,275	125	3.8	Northumberland	3,000	2,825	150	5.4
Chester	11,250	11,000	250	2.3	Perry	1,150	1,125	50	3.6
Clarion	1,175	1,100	75	6.6	Philadelphia	36,800	35,300	1,500	4.1
Clearfield	2,425	2,275	175	6.8	Pike	750	725	25	3.3
Clinton	1,100	1,050	75	6.3	Potter	500	475	25	4.7
Columbia	1,800	1,700	100	5.0	Schuylkill	5,000	4,750	250	5.0
Crawford	2,825	2,675	150	5.7	Snyder	875	850	25	2.9
Cumberland	6,125	6,000	125	2.2	Somerset	2,375	2,225	150	6.1
Dauphin	7,600	7,350	250	3.3	Sullivan	150	150	1/	3.3
Delaware	16,100	15,650	450	2.8	Susquehanna	1,275	1,200	50	4.9
Elk	1,125	1,075	50	4.8	Tioga	1,150	1,075	50	4.5
Erie	9,425	8,950	475	5.0	Union	1,025	1,000	25	3.1
Fayette	3,900	3,575	325	8.4	Venango	2,025	1,900	125	5.6
Forest	150	125	1/	7.2	Warren	1,625	1,550	75	4.4
Franklin	3,275	3,175	100	3.3	Washington	5,850	5,475	375	6.5
Fulton	350	350	25	5.6	Wayne	1,250	1,200	50	4.0
Greene	1,275	1,175	125	9.2	Westmoreland	10,750	10,025	725	6.8
Huntingdon	1,275	1,200	100	6.8	Wyoming	950	900	50	5.2
Indiana	2,850	2,650	175	6.5	York	10,700	10,375	325	3.1
Jefferson	1,425	1,350	75	5.8					
Juniata	475	450	25	5.2					
Lackawanna	6,950	6,650	300	4.3	PENNSYLVANIA	349,000	334,000	15,000	4.2

1/ Data are less than 13.
Data are on 1987 Benchmarks.
Data may not add to totals due to rounding to the nearest 25.
The rate of unemployment is calculated from unrounded data.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 10

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA BY COUNTY OF RESIDENCE
FOR TOTAL VETERANS

1987 ANNUAL AVERAGE

COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)	COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)
Adams	4,525	4,375	175	3.7	Lancaster	24,675	23,950	725	3.0
Allegheny	122,225	115,625	6,600	5.4	Lawrence	7,775	7,375	400	5.2
Armstrong	6,625	6,125	500	7.5	Lebanon	8,500	8,250	250	3.1
Beaver	16,550	15,025	1,500	9.1	Lehigh	22,325	21,475	850	3.8
Bedford	3,000	2,825	200	6.3	Luzerne	28,350	26,550	1,775	6.3
Berks	25,225	24,250	975	3.8	Lycoming	8,700	8,325	375	4.4
Blair	10,300	9,725	575	5.7	McKean	3,625	3,400	225	5.9
Bradford	4,125	3,925	175	4.5	Mercer	8,625	8,175	450	5.3
Bucks	52,425	51,025	1,400	2.7	Mifflin	3,225	3,025	200	6.2
Butler	11,650	11,050	600	5.1	Monroe	6,975	6,750	250	3.4
Cambria	13,050	12,225	825	6.4	Montgomery	67,100	65,550	1,550	2.3
Cameron	575	550	25	5.3	Montour	1,175	1,125	50	3.9
Carbon	4,675	4,400	275	5.8	Northampton	17,850	17,125	750	4.2
Centre	7,325	7,025	325	4.3	Northumberland	7,675	7,225	475	6.1
Chester	32,650	31,950	700	2.2	Perry	2,550	2,450	100	4.1
Clarion	2,750	2,525	200	7.5	Philadelphia	109,200	104,500	4,700	4.3
Clearfield	5,900	5,450	450	7.6	Pike	2,150	2,075	75	3.7
Clinton	3,000	2,775	200	7.1	Potter	1,225	1,175	75	5.3
Columbia	4,425	4,175	250	5.6	Schuylkill	13,300	12,550	750	5.6
Crawford	6,275	5,875	400	6.4	Snyder	1,950	1,875	75	3.2
Cumberland	15,225	14,850	375	2.4	Somerset	5,550	5,175	375	6.8
Dauphin	18,775	18,050	700	3.8	Sullivan	425	400	25	3.7
Delaware	53,825	52,400	1,450	2.7	Susquehanna	2,750	2,600	150	5.5
Elk	2,900	2,725	150	5.4	Tioga	2,600	2,475	125	5.1
Erie	20,375	19,225	1,150	5.7	Union	2,200	2,125	75	3.5
Fayette	12,425	11,250	1,175	9.4	Venango	4,450	4,175	275	6.3
Forest	400	350	25	8.1	Warren	3,700	3,525	175	5.0
Franklin	8,275	7,975	300	3.7	Washington	17,775	16,500	1,300	7.2
Fulton	850	775	50	6.3	Wayne	2,900	2,775	125	4.5
Greene	2,750	2,450	275	10.4	Westmoreland	32,025	29,575	2,450	7.6
Huntingdon	3,025	2,775	225	7.7	Wyoming	1,900	1,800	100	5.8
Indiana	5,775	5,350	425	7.3	York	23,900	23,050	850	3.5
Jefferson	3,400	3,175	225	6.5					
Juniata	1,150	1,075	75	5.9					
Lackawanna	18,500	17,600	900	4.9					
					PENNSYLVANIA	952,000	908,000	44,000	4.6

Data are on 1987 Benchmarks.
Data may not add to totals due to rounding
The rate of unemployment is calculated from unrounded data.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

III. INDUSTRY TRENDS AND DEVELOPMENTS

A. Employment Trends By Industry

With the return to a peacetime economy in the late 1940s, a quiet but profound revolution began to develop in factories and offices throughout most of the industrialized countries of the world. This was a shift of manpower away from the production of goods and toward the production of services. Just as mechanized agriculture made it possible for a single farmer to feed an ever-increasing number of people, with the result that fewer workers were needed to produce food and fiber, so increasingly sophisticated production methods made it possible for factories to turn out a constantly expanding variety of industrial and consumer goods with a smaller share of the labor force.

In the United States the past 30 years have seen the manufacturing industries reach peak employment levels and then decline sharply, while still keeping up with the insatiable consumer appetite for more and better goods of wider variety, and at lower relative cost. One need only consider the far greater numbers of models of automobiles or flavors of ice cream available today than existed 30 years ago to appreciate the proliferation of consumer goods. Home computers are commonplace today; fifteen years ago even the simplest computers required their own building and environmental control system, carried price tags in the millions, and could be used only by people with degrees in computer science.

These and countless other fruits of technology are available to a larger segment of the population. But the technology which has benefitted the consumer has also had the circular effect of improving manufacturing production methods so that less labor is required. Furthermore, labor costs have risen faster than inflation, with the result that many American companies have moved their production facilities to countries where labor costs are lower. Foreign-made goods have taken over an increasing share of the American market, particularly as their quality has risen in recent years. The bottom line from these profound developments is that manufacturing employment has declined steadily in the United States for more than twenty years.

The shift from manufacturing to nonmanufacturing employment has occurred in Pennsylvania as well. It has been a long-term trend, but has become much more pronounced with a pair of back-to-back recessions in 1979 and the early 1980s. Over the 1975-1987 period, as depicted in Table 12, employment in manufacturing dropped 292,700 jobs while nonmanufacturing employment soared by 771,400 to 3,872,400 in 1987, a figure higher than the total of all nonagricultural jobs in the state prior to the early 1960s. In the manufacturing division, employment in both

the durable goods and nondurable goods sectors fell during this thirteen-year period. Annual average 1987 employment in the nonmanufacturing division increased by 231,600 over the 1986 total to attain the highest annual average job count on record. Specific nonmanufacturing industry lines providing record job levels during 1987 were services (1,274,300), retail trade (859,400), finance, insurance and real estate (291,700), and wholesale trade with 263,200 jobs.

Table 12A presents a historical picture of job levels in Pennsylvania's manufacturing industries. At 1,042,100 jobs in 1987 manufacturing payrolls declined by 47,500 since 1985. Durable goods again bore the brunt of job erosion with primary metals alone losing 16,500 jobs over the two-year period. Among nondurable goods industries, the apparel and other textile products line, another troubled area, continued to lose jobs posting a two-year decline of 14,000. As Table 13 shows, during 1960 manufacturing employment accounted for 38.9 percent of all nonagricultural jobs in Pennsylvania. By 1987 this figure fell to 21.2 percent. During this same twenty-seven year period nonmanufacturing jobs, as a percent of all nonagricultural jobs, rose from 61.1 percent to 78.8 percent.

TABLE 11

PENNSYLVANIA METROPOLITAN AREA 1/

EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY MAJOR INDUSTRY GROUP
(in thousands)

INDUSTRY GROUP	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NONAGRICULTURAL WAGE AND SALARY	3,895.3	3,949.6	4,000.2	4,128.9	4,201.8	4,159.9	4,157.9	4,021.6	3,982.8	4,100.6	4,166.7	4,224.4	4,327.8
MANUFACTURING	1,153.7	1,150.3	1,156.1	1,177.6	1,191.3	1,135.2	1,120.8	1,009.1	944.8	964.6	934.7	897.1	885.4
NONMANUFACTURING	2,737.4	2,791.7	2,839.6	2,942.2	3,004.5	3,021.9	3,032.4	3,009.7	3,035.2	3,133.8	3,231.8	3,327.4	3,442.6
Mining	25.8	27.5	26.6	24.3	27.1	25.3	22.5	21.4	17.8	17.2	16.5	15.0	13.6
Contract Construction	160.1	158.1	159.9	176.0	179.8	172.0	163.3	153.1	150.3	159.6	169.7	184.3	201.9
Transportion and Public Utilities	225.9	225.6	230.3	236.4	241.2	231.8	226.8	218.0	210.5	215.9	211.5	211.1	215.4
Wholesale and Retail Trade	793.1	812.8	834.7	869.6	876.1	874.8	880.8	868.1	886.2	919.0	950.1	974.0	998.7
Finance, Insurance and Real Estate	188.5	192.6	198.2	208.0	215.1	219.7	223.7	222.1	225.1	234.2	242.6	256.2	271.1
Service	723.5	755.4	799.3	810.7	854.3	882.5	914.9	945.2	970.4	1,012.6	1,059.7	1,107.3	1,156.7
Government	620.9	623.0	610.7	617.0	610.3	613.1	600.7	581.1	575.4	575.6	581.6	579.8	585.2
Federal	120.0	120.9	115.2	116.0	117.1	117.4	119.4	119.1	118.5	120.0	123.7	124.4	126.4
State and Local	500.9	505.1	495.5	501.0	493.2	495.7	481.3	462.0	456.9	455.6	457.9	456.8	460.1

1/ PENNSYLVANIA METROPOLITAN AREA is the sum of all Pennsylvania Counties that are located in Metropolitan Statistical Areas (MSAs).

Data are annual averages for all years shown.
Data for 1975 through 1980 include information for the State College-Bellefonte LMA rather than the State College MSA.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 12

PENNSYLVANIA

EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY MAJOR INDUSTRY GROUP
(in thousands)

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1987	RECORD HIGH 1/	RECORD LOW 2/
NONAGRICULTURAL WAGE AND SALARY	2,893.5	3,335.3	3,644.4	3,749.6	3,715.4	3,917.5	4,351.6	4,435.8	4,753.1	4,730.3	4,914.5	4,914.5 (1987)	2,701.5 (1939)
MANUFACTURING	1,134.3	1,485.4	1,485.5	1,515.0	1,444.5	1,494.1	1,528.8	1,334.8	1,328.2	1,089.6	1,042.1	1,653.5 (1953)	1,042.1 (1987)
NONMANUFACTURING	1,759.1	1,849.9	2,158.9	2,234.5	2,271.0	2,423.4	2,822.8	3,101.0	3,424.9	3,640.8	3,872.4	3,872.4 (1987)	1,640.1 (1939)
Mining	222.2	177.1	176.0	94.4	58.3	45.3	39.5	46.1	49.0	36.3	30.9	222.2 (1940)	30.9 (1987)
Contract Construction	87.9	75.4	157.1	175.5	154.7	165.5	192.0	184.5	190.1	187.1	222.1	222.1 (1987)	68.9 (1944)
Transportion and Public Utilities	270.4	319.3	330.7	317.4	278.6	263.4	267.5	256.5	263.3	240.6	245.3	347.2 (1951)	239.5 (1986)
Wholesale Trade	NA	NA	156.4	169.7	176.6	182.4	203.2	216.1	244.3	254.0	263.2	263.2 (1987)	148.8 (1947)
Retail Trade	NA	NA	483.2	501.4	508.0	529.9	613.3	670.8	744.0	813.4	859.4	859.4 (1987)	470.1 (1947)
Finance, Insurance and Real Estate	97.5	95.8	121.1	139.3	152.9	162.1	189.9	207.3	236.8	263.1	291.7	291.7 (1987)	89.9 (1939)
Service	294.3	303.8	395.7	440.7	505.8	566.5	698.8	798.5	974.1	1,166.1	1,274.3	1,274.3 (1987)	278.4 (1939)
Government	292.2	390.8	338.7	396.1	436.1	508.4	618.7	721.4	723.3	680.2	685.5	723.3 (1980)	286.8 (1939)
Federal	NA	NA	108.6	138.5	134.2	135.4	145.3	134.4	134.9	138.3	141.6	151.7 (1952)	107.4 (1948)
State and Local	NA	NA	230.1	257.6	302.0	373.0	473.3	587.0	588.4	541.7	543.9	591.2 (1978)	221.5 (1947)

1/ Highest employment figure recorded for years for which data are available.
2/ Lowest employment figure recorded for years for which data are available.

Data available back to 1947 for state and local government and for wholesale and retail trade, and to 1939 for other industries

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 12A

PENNSYLVANIA

EMPLOYEES ON MANUFACTURING PAYROLLS BY MAJOR INDUSTRY GROUP
(In thousands)

INDUSTRY GROUP	1972	1975	1978	1980	1982	1983	1984	1985	1987	RECORD HIGH 1/	RECORD LOW 2/
MANUFACTURING	1,444.0	1,334.8	1,367.8	1,328.2	1,170.5	1,095.8	1,121.9	1,089.8	1,042.1	1,480.1 [1973]	1,042.1 [1987]
DURABLE GOODS	841.7	813.0	827.6	814.7	665.8	622.1	646.0	628.6	591.0	894.1 [1974]	591.0 [1987]
Lumber & Wood Products	24.7	18.7	21.9	20.6	18.1	19.8	22.3	24.3	29.5	29.5 [1987]	18.1 [1982]
Furniture & Fixtures	22.5	18.0	20.1	18.8	18.5	18.8	20.2	20.8	21.6	23.8 [1973]	18.0 [1975]
Stone, Clay, & Glass	65.3	60.5	63.7	59.0	51.4	48.7	49.0	47.9	47.1	68.3 [1973]	47.0 [1986]
Primary Metal Industries	210.7	205.5	199.2	190.2	143.3	120.4	117.9	104.1	87.6	226.5 [1974]	87.6 [1987]
Fabricated Metal Products	120.5	114.1	112.6	112.8	96.4	87.2	91.2	91.8	91.7	126.6 [1974]	87.2 [1983]
Machinery, Exc. Electrical	131.0	141.3	137.8	144.2	127.7	109.9	114.7	114.4	103.7	144.5 [1974]	103.7 [1987]
Electric & Electronic Equipment	133.7	126.0	123.9	122.5	107.7	101.5	108.3	104.7	93.5	144.7 [1974]	93.5 [1987]
Transportation Equipment	69.0	67.6	81.8	81.5	63.4	58.7	64.2	63.3	61.2	81.8 [1978]	58.7 [1983]
Instruments and Related Products	34.0	34.4	40.3	41.8	38.5	36.6	37.3	37.3	34.5	42.8 [1979]	34.0 [1972]
Misc. Manufacturing Industries	30.4	27.0	28.3	23.4	20.9	20.5	20.9	20.3	20.6	31.9 [1973]	20.3 [1985]
NONDURABLE GOODS	602.3	521.8	540.3	513.5	484.7	473.8	475.9	461.0	451.1	602.3 [1972]	451.1 [1987]
Food & Kindred Products	109.6	99.4	99.7	96.6	92.0	90.2	90.1	90.0	90.8	109.6 [1972]	90.0 [1986]
Tobacco Products	7.5	5.0	4.0	3.3	2.6	2.3	2.4	2.2	1.2	7.5 [1972]	1.2 [1987]
Textile Mill Products	62.9	49.9	50.1	43.9	38.2	35.6	34.0	30.8	31.1	62.9 [1972]	30.8 [1986]
Apparel & Other Textile Products	182.6	132.7	134.6	124.1	114.5	112.9	113.0	100.2	86.2	182.6 [1972]	86.2 [1987]
Paper & Allied Products	44.9	39.9	44.4	42.4	41.1	40.7	41.1	41.1	41.2	45.4 [1973]	39.9 [1975]
Printing & Publishing	71.8	68.4	71.3	72.6	72.4	71.9	73.2	75.7	80.8	80.9 [1987]	67.6 [1976]
Chemicals & Allied Products	59.4	55.5	59.9	60.8	59.2	58.1	59.2	59.6	58.9	61.0 [1979]	55.5 [1975]
Petroleum & Coal Products	19.8	16.4	17.3	16.7	16.4	14.8	13.0	12.7	10.5	19.8 [1972]	10.5 [1987]
Rubber & Misc Plastic Products	38.7	34.8	39.9	37.1	33.4	33.2	37.1	37.2	40.1	41.8 [1979]	33.2 [1983]
Leather & Leather Products	25.1	19.8	19.3	16.0	14.9	14.0	12.9	11.3	10.2	25.1 [1972]	10.2 [1987]

1/ Highest employment figure recorded for years for which data are available.
2/ Lowest employment figure recorded for years for which data are available.

Data are annual averages for all years shown.

Data available back to 1972 for detailed two-digit manufacturing industries.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 13

PENNSYLVANIA

PERCENT DISTRIBUTION OF EMPLOYMENT BY INDUSTRY

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1987
NONAGRICULTURAL WAGE AND SALARY	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MANUFACTURING	39.2	44.5	40.8	40.4	38.9	38.1	35.1	30.1	27.9	23.0	21.2
NONMANUFACTURING	60.8	55.5	59.2	59.6	61.1	61.9	64.9	69.9	72.1	77.0	78.8
Mining	7.7	5.3	4.8	2.5	1.6	1.2	0.9	1.0	1.0	0.8	0.6
Contract Construction	3.0	2.3	4.3	4.7	4.2	4.2	4.4	4.2	4.0	4.0	4.5
Transportion and Public Utilities	9.3	9.6	9.1	8.5	7.5	6.7	6.1	5.8	5.5	5.1	5.0
Wholesale Trade	NA	NA	4.3	4.5	4.8	4.7	4.7	4.9	5.1	5.4	5.4
Retail Trade	NA	NA	13.3	13.4	13.7	13.5	14.1	15.1	15.7	17.2	17.5
Finance, Insurance and Real Estate	3.4	2.9	3.3	3.7	4.1	4.1	4.4	4.7	5.0	5.6	5.9
Service	10.2	9.1	10.9	11.8	13.6	14.5	16.1	18.0	20.5	24.7	25.9
Government	10.1	11.7	9.3	10.6	11.7	13.0	14.2	16.3	15.2	14.4	13.9
Federal	NA	NA	3.0	3.7	3.6	3.5	3.3	3.0	2.8	2.9	2.9
State and Local	NA	NA	6.3	6.9	8.1	9.5	10.9	13.2	12.4	11.5	11.1

Data are annual averages for all years shown.

Data available back to 1947 for state and local government and for wholesale and retail trade, and to 1939 for other industries

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 14

UNITED STATES

EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY INDUSTRY GROUP
(in thousands)

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1987	RECORD HIGH 1/	RECORD LOW 2/
NONAGRICULTURAL WAGE AND SALARY	32,361	40,374	45,197	50,641	54,189	60,765	70,880	76,945	90,406	97,519	102,112	102,112 (1987)	25,940 (1934)
MANUFACTURING	10,985	15,524	15,241	16,882	16,796	18,062	19,367	18,323	20,285	19,260	19,112	21,040 (1979)	8,501 (1934)
NONMANUFACTURING	21,376	24,850	29,956	33,759	37,393	42,703	51,513	58,622	70,121	78,260	83,000	83,000 (1987)	17,439 (1934)
Mining	925	836	901	792	712	632	623	752	1,027	927	741	1,139 (1981)	606 (1968)
Contract Construction	1,311	1,147	2,364	2,839	2,926	3,232	3,588	3,525	4,346	4,673	5,031	5,031 (1987)	877 (1934)
Transportion and Public Utilities	3,038	3,906	4,034	4,141	4,004	4,036	4,515	4,542	5,146	5,238	5,378	5,378 (1987)	2,750 (1934)
Wholesale Trade	1,835	1,949	2,635	2,926	3,143	3,466	3,993	4,415	5,275	5,717	5,797	5,797 (1987)	1,822 (1943)
Retail Trade	4,914	5,365	6,751	7,610	8,248	9,250	11,047	12,645	15,035	17,356	18,264	18,264 (1987)	4,914 (1940)
Finance, Insurance and Real Estate	1,485	1,481	1,888	2,298	2,629	2,977	3,645	4,165	5,160	5,955	6,589	6,589 (1987)	1,304 (1934)
Service	3,665	4,222	5,357	6,240	7,378	9,036	11,548	13,892	17,890	22,000	24,137	24,137 (1987)	3,045 (1934)
Government	4,203	5,944	6,026	6,913	8,353	10,074	12,553	14,685	16,241	16,394	17,062	17,062 (1987)	4,203 (1940)
Federal	996	2,808	1,928	2,187	2,270	2,378	2,731	2,748	2,866	2,875	2,943	2,943 (1987)	652 (1934)
State and Local	3,207	3,136	4,098	4,726	6,083	7,696	9,822	11,937	13,375	13,519	14,119	14,119 (1987)	3,134 (1944)

1/ Highest employment figure recorded for years for which data are available.
2/ Lowest employment figure recorded for years for which data are available.

Data are annual averages for all years shown.

Data available back to 1940 for state and local government and for wholesale and retail trade, and to 1934 for other industries

SOURCE: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March 1988.

TABLE 15

UNITED STATES

PERCENT DISTRIBUTION OF EMPLOYMENT BY INDUSTRY

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1987
NONAGRICULTURAL WAGE AND SALARY	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MANUFACTURING	33.9	38.5	33.7	33.3	31.0	29.7	27.3	23.8	22.4	19.7	18.7
NONMANUFACTURING	66.1	61.5	66.3	66.7	69.0	70.3	72.7	76.2	77.6	80.3	81.3
Mining	2.9	2.1	2.0	1.6	1.3	1.0	0.9	1.0	1.1	1.0	0.7
Contract Construction	4.1	2.8	5.2	5.6	5.4	5.3	5.1	4.6	4.8	4.8	4.9
Transportion and Public Utilities	9.4	9.7	8.9	8.2	7.4	6.6	6.4	5.9	5.7	5.4	5.3
Wholesale Trade	5.7	4.8	5.8	5.8	5.8	5.7	5.6	5.7	5.8	5.9	5.7
Retail Trade	15.2	13.3	14.9	15.0	15.2	15.2	15.6	16.4	16.6	17.8	17.9
Finance, Insurance and Real Estate	4.6	3.7	4.2	4.5	4.9	4.9	5.1	5.4	5.7	6.1	6.5
Service	11.3	10.5	11.9	12.3	13.6	14.9	16.3	18.1	19.8	22.6	23.6
Government	13.0	14.7	13.3	13.7	15.4	16.6	17.7	19.1	18.0	16.8	16.7
Federal	3.1	7.0	4.3	4.3	4.2	3.9	3.9	3.6	3.2	2.9	2.9
State and Local	9.9	7.8	9.1	9.3	11.2	12.7	13.9	15.5	14.8	13.9	13.8

Data are annual averages for all years shown.

Data available back to 1940 for state and local government and for wholesale and retail trade, and to 1934 for other industries

SOURCE: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March 1988.

TABLE 16

UNITED STATES

PERCENT DISTRIBUTION OF INDUSTRY EMPLOYMENT BY SEX
1977 AND 1987 ANNUAL AVERAGES

Industry Title	1977		1987	
	Male	Female	Male	Female
Nonagricultural Wage and Salary	59.8	40.2	53.7	46.3
Manufacturing Industries	70.3	29.7	67.2	32.8
Durable Goods	77.2	22.8	73.3	26.7
Lumber and Wood Products	86.9	13.1	84.0	16.0
Furniture and Fixtures	71.6	28.4	68.7	31.3
Stone, Clay and Glass Products	82.0	18.0	80.5	19.5
Primary Metal Industries	91.0	9.0	86.5	13.5
Fabricated Metal Products	79.8	20.2	77.3	22.7
Machinery, except Electrical	82.7	17.3	78.0	22.0
Electrical and Electronic Equipment	58.3	41.7	58.4	41.6
Transportation Equipment	86.6	13.4	80.6	19.4
Instruments and Related Products	59.7	40.3	56.7	43.3
Miscellaneous Manufacturing	54.2	45.8	53.7	46.3
Nondurable Goods	60.3	39.7	58.4	41.6
Food and Kindred Products	72.3	27.7	68.4	31.6
Tobacco Manufacturing	62.3	37.7	68.1	31.9
Textile Mill Products	52.9	47.1	51.8	48.2
Apparel and Other Textile Products	19.4	80.6	20.3	79.7
Paper and Allied Products	78.5	21.5	75.5	24.5
Printing and Publishing	63.9	36.1	57.1	42.9
Chemicals and Allied Products	77.5	22.5	71.3	28.7
Petroleum and Coal Products	88.6	11.4	85.4	14.6
Rubber and Miscellaneous Plastics	65.8	34.2	65.4	34.6
Leather and Leather Products	39.7	60.3	40.2	59.8
Nonmanufacturing Industries	56.6	43.4	50.6	49.4
Mining	92.2	7.8	86.8	13.2
Contract Construction	93.0	7.0	89.4	10.6
Transportation and Public Utilities	77.4	22.6	71.5	28.5
Wholesale Trade	75.4	24.6	70.5	29.5
Retail Trade	52.5	47.5	47.0	53.0
Finance, Insurance and Real Estate	44.0	56.0	37.6	62.4
Services	43.6	56.4	39.4	60.6
Government	54.2	45.8	49.0	51.0
Federal Government	68.5	31.5	64.4	35.6
State Government	55.2	44.8	51.9	48.1
Local Government	49.5	50.5	43.4	56.6

NOTE: Breakdown of industry employment by sex is not available for states or local areas. However, in most areas, the actual distribution of the sexes in particular industries is not likely to vary widely from the national averages.

SOURCE: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March 1978 and March 1988.

TABLE 17
PENNSYLVANIA
FIFTY LARGEST EMPLOYERS
MARCH 1988

RANK	NAME OF EMPLOYER
1	UNITED STATES GOVERNMENT
2	* PENNSYLVANIA STATE GOVERNMENT
3	CITY OF PHILADELPHIA
4	SCHOOL DISTRICT OF PHILADELPHIA
5	SEARS ROEBUCK & CO.
6	WESTINGHOUSE ELECTRIC CORP.
7	BELL TELEPHONE COMPANY
8	COMMONWEALTH OF PA - P S U
9	GENERAL ELECTRIC CO.
10	UNIVERSITY OF PITTSBURGH
11	ACME MARKETS, INC.
12	K-MART CORP.
13	J. C. PENNEY CO., INC.
14	TRUSTEES OF THE UNIVERSITY OF PENNA.
15	PHILADELPHIA ELECTRIC CO.
16	THE PRUDENTIAL INSURANCE CO. OF AMERICA
17	BETHLEHEM STEEL CORP.
18	WEIS MARKETS, INC.
19	COMMONWEALTH OF PA - HIGHER EDUCATION
20	UNITED STATES STEEL CORP.
21	UNISYS CORPORATION
22	MELLON BANK
23	UNITED PARCEL SERVICE, INC.
24	STRAWBRIDGE & CLOTHIER
25	A T & T TECHNOLOGIES, INC.
26	TEMPLE UNIVERSITY
27	A M P INCORPORATED
28	COMMONWEALTH OF PA - S E P T A
29	PENNA. POWER & LIGHT CO.
30	THE BOEING COMPANY
31	GIANT EAGLE, INC.
32	SCOA INDUSTRIES, INC.
33	PPG INDUSTRIES, INC.
34	THE BOARD OF EDUCATION OF THE SCHOOL DISTRICT OF PGH.
35	U S AIR, INC.
36	ALLEGHENY COUNTY
37	HERSHEY FOODS CORPORATION
38	BEVERLY ENTERPRISES, INC.
39	ARMSTRONG WORLD IND., INC.
40	INT'L. BUSINESS MACHINES CORP.
41	CITY OF PITTSBURGH
42	SUPERMARKETS GENERAL CORP.
43	THE PHILADELPHIA NATIONAL BANK
44	SMITHKLINE BECKMAN CORP.
45	GIANT FOOD STORES, INC.
46	R. H. MACY & CO., INC.
47	MERCK & CO., INC.
48	INSURANCE CO. OF NORTH AMERICA
49	BOSCOV'S DEPT. STORE, INC.
50	AIR PRODUCTS & CHEMICALS, INC.

* COMMONWEALTH OF PENNSYLVANIA INCLUDES ALL STATE EMPLOYMENT EXCEPT PENNSYLVANIA STATE UNIVERSITY, SEPTA, AND THE SYSTEM OF HIGHER EDUCATION.

B. Industry Outlook

Nonagricultural wage and salary employment statewide is expected to reach 5,102,000 by 1995. This represents an increase of 362,900 jobs from 1985 as compared with an increase of 300,100 jobs between 1975 and 1985.

The structure of employment in Pennsylvania has undergone considerable change in recent decades. Manufacturing's share of nonagricultural wage and salary employment has dropped from 38.9 percent in 1960 to 35.1 percent in 1970 to 23.0 percent in 1985. The primary metal industry led the decline, with its share of employment dropping from 6.8 percent in 1960 to 2.2 percent in 1985, followed by apparel and other textile products, with 4.5 percent in 1960 and 2.1 percent in 1985. In contrast, nonmanufacturing industries, particularly services, have experienced rapid growth and have increased their share of nonagricultural wage and salary employment from 61.1 percent in 1960 to 77.0 percent in 1985.

Between 1960 and 1970, nonagricultural wage and salary employment in Pennsylvania rose by 17.1 percent. The nonmanufacturing sector had a gain of 24.3 percent while manufacturing grew by 5.8 percent. The most rapid increase among broad industry groups, was posted by the government segment of nonmanufacturing, which grew at an annual average compounded rate of 3.6 percent or 41.9 percent for the decade. Expansion of government during the 1960's reflected not only the strong demand for teachers and other educational personnel as the baby-boom generation entered school, but also the effects of the Vietnam war buildup, and increases in government services resulting from the "Great Society" and other programs.

During the 1970's, job growth continued in nonmanufacturing industries with the exception of slight employment losses in federal government, contract construction, and transportation and public utilities. Between 1970 and 1980, employment rose 39.4 percent in services, 24.3 percent in state and local government, 24.7 percent in finance, insurance and real estate, and 21.0 percent in trade. During the same time period manufacturing employment dropped by 13.1 percent. This decline was led by a 23.5 percent loss in apparel and other textile products and an 18.1 percent loss in primary metals.

Over the 1975-1985 period, employment in manufacturing dropped 245,700 jobs while nonmanufacturing employment soared by 547,800 to 3,646,800 in 1985, a figure higher than the total of all nonagricultural jobs in the state prior to the 1950s. In the manufacturing division, employment in both the durable goods and nondurable goods sectors fell during this period. Primary metals

and apparel and textile products again bore the brunt of the job erosion. Annual average 1985 employment in the nonmanufacturing division increased by 547,800 over the 1975 total. Specific nonmanufacturing industry lines providing record job levels during 1985 were services, retail trade, finance, insurance and real estate, and wholesale trade.

During the 1985-1995 period, the shift from manufacturing to nonmanufacturing employment is expected to continue. Nonmanufacturing employment is projected to increase by 13.7 percent, contrasted with a loss of 12.5 percent for manufacturing industries. This will result in a net gain of 362,900 jobs, an increase of 7.7 percent over the ten-year period. The services industry, paced by health services and business services, is projected to have the largest employment gain among broad industry groups. The employment shares of trade, construction, finance, insurance, and real estate are also expected to rise through 1995. Although small gains are projected for government, transportation and public utilities, these industries will represent smaller portions of all jobs by 1995.

Projected declines in durable goods industries account for three out of four job losses in the manufacturing sector. Once again, the greatest losses are expected to occur in the primary metal industries. The only durable goods industry showing employment growth potential is lumber and wood products.

Two out of three of the projected job losses in nondurable goods will likely occur in the apparel and other textile products industry, as foreign imports and domestic competition continue to plague this industry. Employment growth is projected for printing and publishing, chemicals and allied products, and food and kindred products industries.

TABLE 18

SUMMARY TABLE

PENNSYLVANIA AND MAJOR LABOR MARKET AREA TOTAL NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT:
ANNUAL AVERAGE 1985 AND PROJECTED 1995

[Data are a count of jobs in thousands]

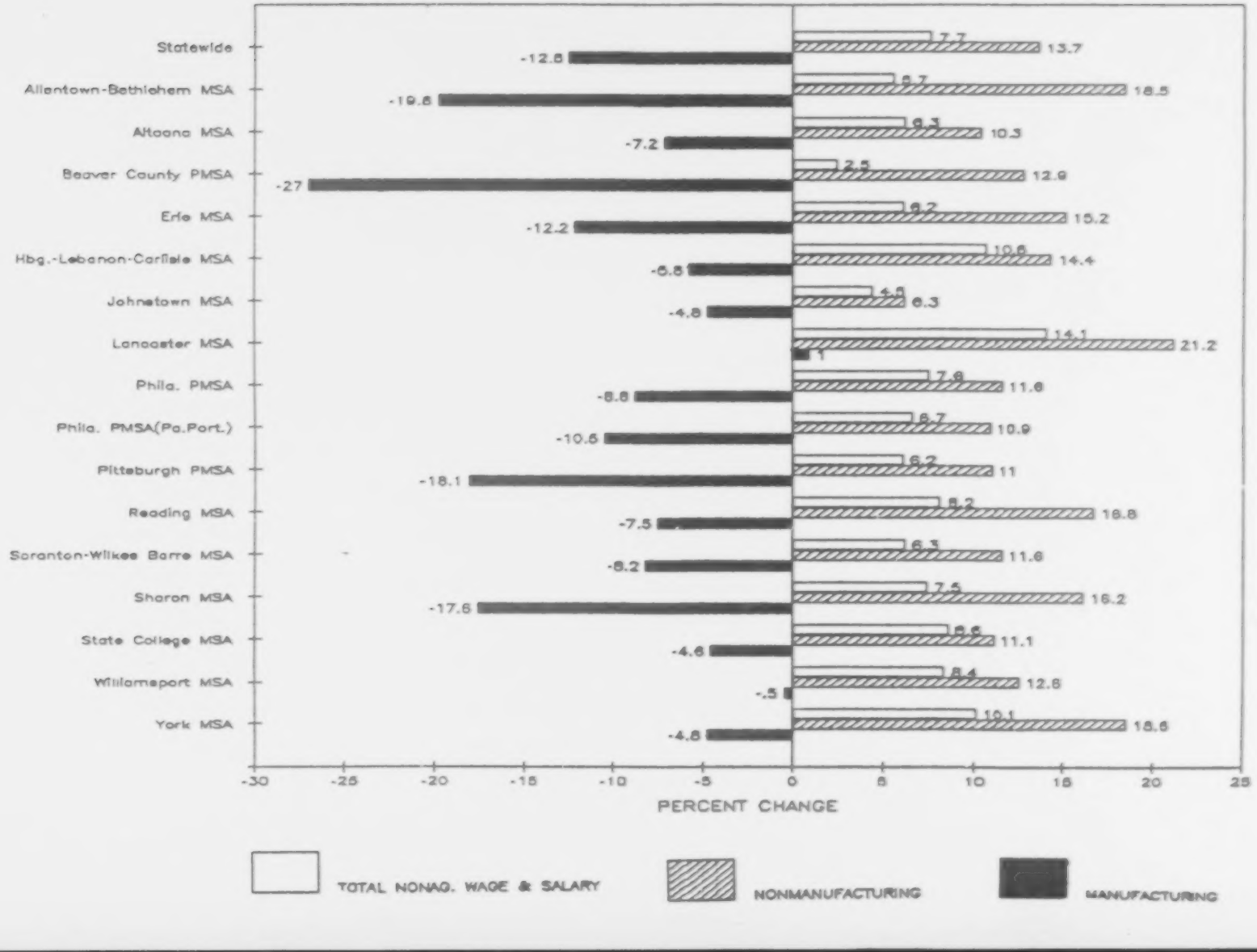
State and Major Labor Market Areas	Total Nonagricultural Wage and Salary Employment			
	Employment		Change '85-'95	
	1985	1995	#	%
Statewide	4,739.1	5,102.0	362.9	7.7
Allentown-Bethlehem MSA	262.8	277.9	15.1	5.7
Altoona MSA	49.1	52.2	3.1	6.3
Beaver County PMSA	53.5	54.8	1.3	2.5
Erie MSA	109.3	116.0	6.7	6.2
Harrisburg-Lebanon-Carlisle MSA	276.3	305.5	29.2	10.6
Johnstown MSA	76.0	79.4	3.4	4.5
Lancaster MSA	165.9	189.4	23.5	14.1
Philadelphia PMSA	2,047.9	2,204.0	156.1	7.6
Philadelphia PMSA (Pa. Portion)	1,652.2	1,763.0	110.8	6.7
Pittsburgh PMSA	850.0	903.0	53.0	6.2
Reading MSA	142.3	154.0	11.7	8.2
Scranton-Wilkes Barre MSA	275.2	292.5	17.3	6.3
Sharon MSA	40.0	43.0	3.0	7.5
State College MSA	49.4	53.7	4.3	8.6
Williamsport MSA	45.5	49.3	3.8	8.4
York MSA	161.3	177.6	16.3	10.1

Percent change based on unrounded figures.

SOURCE: Bureau of Research and Statistics, Dept. of Labor and Industry

GRAPH 1

PENNSYLVANIA & MAJOR LABOR MARKET AREAS
PERCENT CHANGE IN EMPLOYMENT BY BROAD INDUSTRIAL CATEGORIES
FROM 1985 TO PROJECTED 1995



GRAPH 2

PENNSYLVANIA
PERCENT DISTRIBUTION OF NONAGRICULTURAL WAGE & SALARY EMPLOYMENT
BY MAJOR INDUSTRY DIVISIONS
FOR ESTIMATED 1975 & 1985 AND PROJECTED 1995

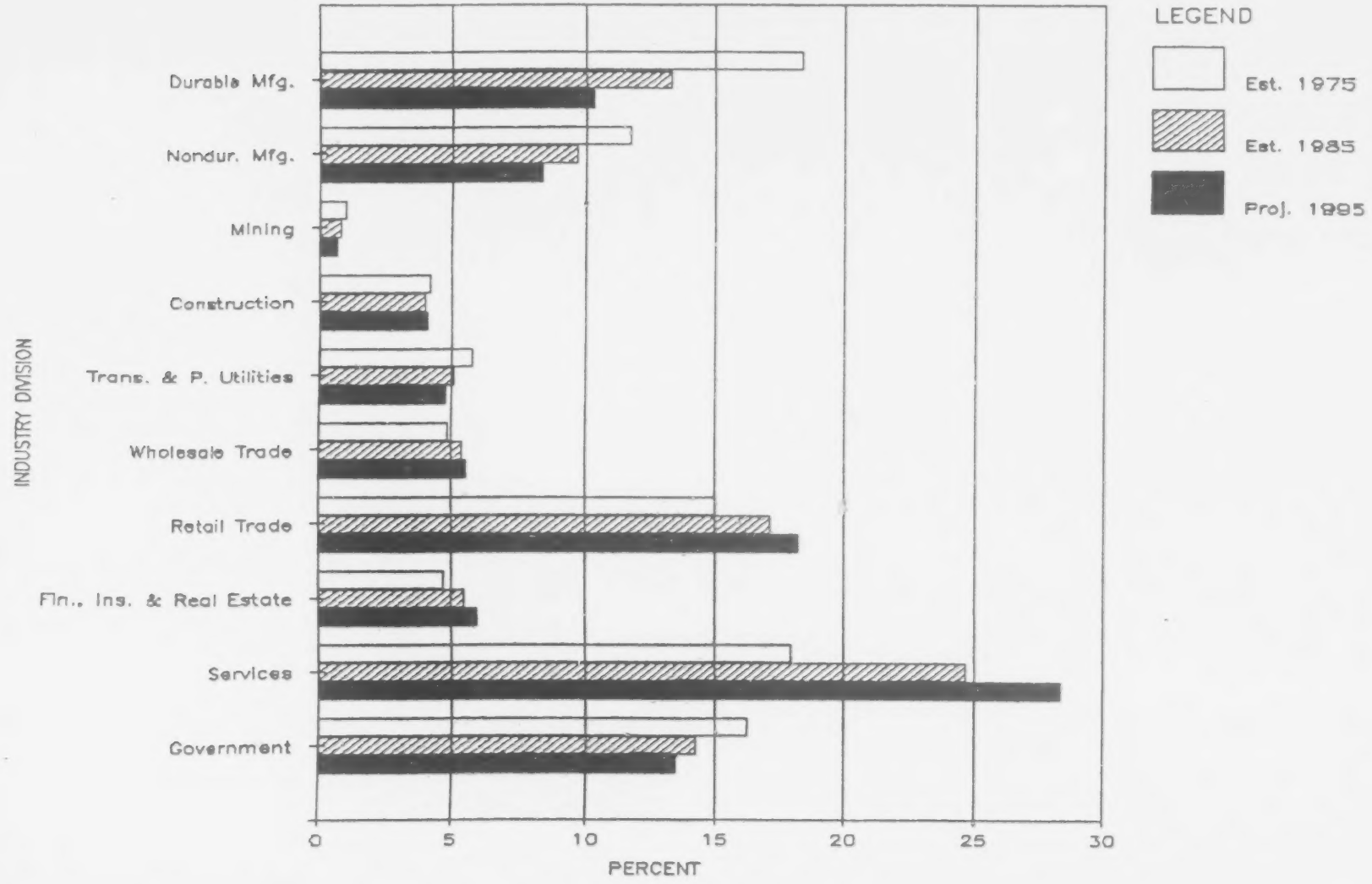


TABLE 19

PENNSYLVANIA

PROJECTED EMPLOYMENT CHANGES FOR SELECTED INDUSTRIES

FROM 1985 TO 1995

Largest Job Gains by Volume	Employment Gain
1. Health Services [Private]	94,300
2. Business Services	79,900
3. Eating & Drinking Places	53,100
4. Wholesale Trade - Durable Goods	27,600
5. Social Services	22,250
6. Food Stores	19,870
7. Educational Services [Private]	16,000
8. General Merchandise Stores	13,450
9. Miscellaneous Retail	12,900
10. Banking	11,600
11. Insurance Carriers	10,800
12. Legal Services	10,600
13. Miscellaneous Services	10,400
14. Hotels & Other Lodging Places	10,200
15. Special Trade Contractors	8,600

Fastest Growing by Rate of Change	% Increase
1. Holding & Other Investment Offices	44.8
2. Business Services	42.7
3. Legal Services	33.8
4. Social Services	32.1
5. Miscellaneous Repair Services	28.5
6. Transportation Services	26.0
7. Health Services [Private]	24.4
8. Security, Commodity Brokers & Serv.	22.4
9. Credit Agencies Other Than Banks	21.6
10. Eating & Drinking Places	21.5
11. Transportation by Air	20.3
11. Amusement & Recreation Services	20.3
13. Hotels & Other Lodging Places	19.9
14. Miscellaneous Services	19.5
15. Wholesale Trade - Durable Goods	17.4

Most Job Loss by Volume	Employment Loss
1. Primary Metal Industries	33,650
2. Apparel & Other Textile Products	21,900
3. Machinery, Exc. Electrical	19,850
4. Electric & Electronic Equipment	15,700
5. Fabricated Metal Products	14,350
6. Transportation Equipment	10,950
7. Textile Mill Products	6,600
8. Stone, Clay & Glass Products	5,400
9. Railroad Transportation	5,200
10. Leather & Leather Products	3,200
11. Petroleum & Coal Products	3,000
12. Bituminous Coal & Lignite Mining	2,600
13. Instruments & Related Products	2,500
14. Furniture & Fixtures	1,800
14. Federal Goverment	1,800

Most Rapidly Declining by Rate of Change	% Decrease
1. Metal Mining	100.0
2. Tobacco Manufactures	65.2
3. Primary Metal Industries	32.2
4. Leather & Leather Products	28.3
5. Petroleum & Coal Products	23.8
6. Railroad Transportation	22.9
7. Apparel & Other Textile Products	21.9
8. Textile Mill Products	21.3
9. Machinery, Exc. Electrical	17.4
10. Transportation Equipment	17.2
11. Fabricated Metal Products	15.6
12. Electric & Electronic Equipment	15.0
13. Stone, Clay & Glass Products	11.3
14. Bituminous Coal & Lignite Mining	11.0
15. Anthracite Mining	9.8

SOURCE: Bureau of Research and Statistics, Pa. Dept. of Labor and Industry

TABLE 20

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
TOTAL ALL NONAG. WAGE & SALARY IND.		4,739,100	5,102,000	362900	7.7	36290
TOTAL MANUFACTURING INDUSTRIES		1,090,860	954,000	-136860	-12.5	-13686
TOTAL DURABLE GOODS		629,000	525,500	-103500	-16.5	-10350
24	LUMBER & WOOD PRODUCTS	24,000	25,800	1800	7.5	180
243	Millwork, plywood & structural	7,180	8,000	820	11.4	82
	Other lumber & wood products	16,820	17,800	980	5.8	98
25	FURNITURE & FIXTURES	20,400	18,600	-1800	-8.8	-180
251	Household furniture	8,060	7,000	-1060	-13.2	-106
252	Office furniture	5,650	5,300	-350	-6.2	-35
	Other furniture & fixtures	6,690	6,300	-390	-5.8	-39
32	STONE, CLAY & GLASS PRODUCTS	47,900	42,500	-5400	-11.3	-540
322	Glass & glassware, pressed or blown	11,900	10,100	-1800	-15.1	-180
324	Hydraulic cement	2,100	1,800	-300	-14.3	-30
325	Structural clay products	4,900	4,200	-700	-14.3	-70
326	Pottery & related products	3,800	3,300	-500	-13.2	-50
327	Concrete, gypsum & plaster products	7,500	7,100	-400	-5.3	-40
	Other stone, clay & glass products	17,700	16,000	-1700	-9.6	-170
33	PRIMARY METAL INDUSTRIES	104,650	71,000	-33650	-32.2	-3365
331	Blast furnace & basic steel products	67,650	42,500	-25150	-37.2	-2515
332	Iron & steel foundries	10,850	7,800	-3050	-28.1	-305
335	Nonferrous rolling & drawing	12,700	10,000	-2700	-21.3	-270
336	Nonferrous foundries	5,900	4,800	-1100	-18.6	-110
	Other primary metal industries	7,550	5,900	-1650	-21.9	-165
34	FABRICATED METAL PRODUCTS	91,850	77,500	-14350	-15.6	-1435
341	Metal cans & shipping containers	2,700	2,000	-700	-25.9	-70
342	Cutlery, hand tools & hardware	5,450	4,800	-650	-11.9	-65
343	Plumbing & heating exc. electrical	2,210	1,700	-510	-23.1	-51
344	Fabricated structural metal products	31,910	28,100	-3810	-11.9	-381
345	Screw machine products, bolts, etc.	6,610	5,100	-1510	-22.8	-151
346	Metal forgings & stampings	15,630	12,000	-3630	-23.2	-363
347,8	Metal serv. & ordnance n.e.c.	8,340	7,300	-1040	-12.5	-104
349	Miscellaneous fabricated metal prods.	19,000	16,500	-2500	-13.2	-250

TABLE 20 (Cont.)
PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
35	MACHINERY, EXC. ELECTRICAL	114,350	94,500	-19850	-17.4	-1985
351	Engines & Turbines	5,200	3,700	-1500	-28.8	-150
352	Farm & garden machinery	3,200	2,700	-500	-15.6	-50
353	Construction & related machinery	16,700	12,500	-4200	-25.1	-420
354	Metal working machinery	18,900	15,700	-3200	-16.9	-320
355	Special industry machinery	9,200	7,100	-2100	-22.8	-210
356	General industrial machinery	22,000	17,300	-4700	-21.4	-470
357	Office and computing machines	14,420	15,000	580	4.0	58
358	Refrigeration & service industry mach.	9,600	8,300	-1300	-13.5	-130
359	Miscellaneous machinery, exc. elec.	15,130	12,200	-2930	-19.4	-293
36	ELECTRIC & ELECTRONIC EQUIPMENT	104,400	88,700	-15700	-15.0	-1570
361	Electric distributing equipment	8,000	6,000	-2000	-25.0	-200
362	Electrical industrial apparatus	16,900	13,500	-3400	-20.1	-340
363	Household appliances	3,200	2,500	-700	-21.9	-70
364	Electric lighting & wiring equipment	21,200	19,000	-2200	-10.4	-220
366	Communication equipment	10,300	9,000	-1300	-12.6	-130
367	Electronic components & accessories	35,600	31,000	-4600	-12.9	-460
	Other electric & electronic equipment	9,200	7,700	-1500	-16.3	-150
37	TRANSPORTATION EQUIPMENT	63,750	52,800	-10950	-17.2	-1095
371	Motor vehicles & equipment	25,500	20,800	-4700	-18.4	-470
372	Aircraft & parts	10,200	9,500	-700	-6.9	-70
373	Ship & boat building & repairing	2,100	1,300	-800	-38.1	-80
374	Railroad equipment	11,300	7,800	-3500	-31.0	-350
	Other transportation equipment	14,650	13,400	-1250	-8.5	-125
38	INSTRUMENTS & RELATED PRODUCTS	37,600	35,100	-2500	-6.6	-250
382	Measuring & controlling devices	17,100	15,000	-2100	-12.3	-210
384	Medical instruments & supplies	11,300	11,200	-100	-0.9	-10
	Other instruments & related products	9,200	8,900	-300	-3.3	-30
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	20,100	19,000	-1100	-5.5	-110

TABLE 20 (Cont.)
PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
	TOTAL NONDURABLE GOODS	461,860	428,500	-33360	-7.2	-3336
20	FOOD & KINDRED PRODUCTS	90,500	91,800	1300	1.4	130
201	Meat products	13,500	14,500	1000	7.4	100
202	Dairy products	10,600	11,000	400	3.8	40
203	Preserved fruits & vegetables	11,200	11,400	200	1.8	20
204	Grain mill products	5,500	6,000	500	9.1	50
205	Bakery products	17,100	16,700	-400	-2.3	-40
206	Sugar & confectionery products	14,200	13,900	-300	-2.1	-30
208	Beverages	8,600	8,400	-200	-2.3	-20
	Other food & kindred products	9,800	9,900	100	1.0	10
21	TOBACCO MANUFACTURES	2,300	800	-1500	-65.2	-150
22	TEXTILE MILL PRODUCTS	31,000	24,400	-6600	-21.3	-660
222	Weaving mills, synthetics	4,000	3,400	-600	-15.0	-60
225	Knitting Mills	13,000	10,100	-2900	-22.3	-290
227	Floor covering mills	3,000	2,700	-300	-10.0	-30
228	Yarn & thread mills	2,800	2,100	-700	-25.0	-70
	Other textile mill products	8,200	6,100	-2100	-25.6	-210
23	APPAREL & OTHER TEXTILE PRODUCTS	100,200	78,300	-21900	-21.9	-2190
231	Men's & boys' suits & coats	13,000	9,500	-3500	-26.9	-350
232	Men's & boys' furnishings	16,400	11,200	-5200	-31.7	-520
233	Women's & misses' outerwear	43,300	34,000	-9300	-21.5	-930
234	Women's & children's undergarments	9,800	8,500	-1300	-13.3	-130
236	Children's outerwear	6,300	5,700	-600	-9.5	-60
	Other apparel & textile products	11,400	9,400	-2000	-17.5	-200
26	PAPER & ALLIED PRODUCTS	41,310	39,800	-1510	-3.7	-151
262	Paper mills exc. building paper	10,400	9,800	-600	-5.8	-60
265	Paperboard containers & boxes	12,600	11,800	-800	-6.3	-80
	Other paper & allied products	18,310	18,200	-110	-0.6	-11
27	PRINTING & PUBLISHING	76,200	79,300	3100	4.1	310
271	Newspapers	22,600	22,000	-600	-2.7	-60
273	Books	5,140	5,300	160	3.1	16
275	Commercial printing	26,300	28,700	2400	9.1	240
276	Manifold business forms	5,080	5,700	620	12.2	62
	Other printing & publishing	17,080	17,600	520	3.0	52

TABLE 20 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
28	CHEMICALS & ALLIED PRODUCTS	59,800	61,300	1500	2.5	150
281	Industrial inorganic chemicals	9,900	10,100	200	2.0	20
282	Plastic materials & synthetics	8,100	7,700	-400	-4.9	-40
283	Drugs	19,600	22,500	2900	14.8	290
284	Soap, cleaners & toilet goods	3,900	4,100	200	5.1	20
285	Paints & allied products	3,800	3,400	-400	-10.5	-40
	Other chemicals & allied products	14,500	13,500	-1000	-6.9	-100
29	PETROLEUM & COAL PRODUCTS	12,600	9,600	-3000	-23.6	-300
291	Petroleum refining	10,000	7,600	-2400	-24.0	-240
	Other petroleum & coal products	2,600	2,000	-600	-23.1	-60
30	RUBBER & MISC. PLASTICS PRODUCTS	36,650	35,100	-1550	-4.2	-155
301	Tires & inner tubes	2,000	800	-1200	-60.0	-120
306	Fabricated rubber products, n.e.c.	4,300	3,900	-400	-9.3	-40
307	Miscellaneous plastics products	28,300	28,800	500	1.8	50
	Other rubber & misc. plastics products	2,050	1,600	-450	-22.0	-45
31	LEATHER & LEATHER PRODUCTS	11,300	8,100	-3200	-28.3	-320
314	Footwear, exc. rubber	8,700	6,200	-2500	-28.7	-250
	Other leather & leather products	2,600	1,900	-700	-26.9	-70
	TOTAL NONMANUFACTURING INDUSTRIES	3,648,240	4,148,000	499760	13.7	49976
10-14	MINING	36,340	33,600	-2740	-7.5	-274
10	METAL MINING	20	0	-20	-100.0	-2
11	ANTHRACITE MINING	2,440	2,200	-240	-9.8	-24
12	BITUMINOUS COAL & LIGNITE MINING	23,600	21,000	-2600	-11.0	-260
13	OIL & GAS EXTRACTION	5,680	6,000	320	5.6	32
14	NONMETALLIC MINERALS, EXCEPT FUELS	4,600	4,400	-200	-4.3	-20

TABLE 20 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
15-17	CONSTRUCTION	189,600	209,000	19400	10.2	1940
15	GENERAL BUILDING CONSTRUCTION	51,200	57,900	6700	13.1	670
16	HEAVY CONSTRUCTION CONTRACTORS	31,900	36,000	4100	12.9	410
17	SPECIAL TRADE CONTRACTORS	106,500	115,100	8600	8.1	860
40-43	TRANSPORTATION & PUBLIC UTILITIES	239,600	245,500	5900	2.5	590
40	RAILROAD TRANSPORTATION	22,700	17,500	-5200	-22.9	-520
41	LOCAL & INTERURBAN PASSENGER TRANSIT	20,700	22,500	1800	8.7	180
42	TRUCKING & WAREHOUSING	66,200	69,700	3500	5.3	350
44	WATER TRANSPORTATION	4,800	4,400	-400	-8.3	-40
45	TRANSPORTATION BY AIR	12,300	14,800	2500	20.3	250
46	PIPE LINES, EXCEPT NATURAL GAS	700	700	0	0.0	0
47	TRANSPORTATION SERVICES	10,400	13,100	2700	26.0	270
48	COMMUNICATION	48,700	47,500	-1200	-2.5	-120
49	ELECTRIC, GAS & SANITARY SERVICES	53,100	55,300	2200	4.1	220
491	Electric services	26,900	28,000	1100	4.1	110
492	Gas production & distribution	8,800	8,400	-400	-4.5	-40
	Other electric, gas & sanitary services	17,400	18,900	1500	8.6	150
50-51	WHOLESALE TRADE	253,800	287,000	33200	13.1	3320
50	WHOLESALE TRADE - DURABLE GOODS	158,400	186,000	27600	17.4	2760
51	WHOLESALE TRADE - NONDURABLE GOODS	95,400	101,000	5600	5.9	560

TABLE 20 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
52-59	RETAIL TRADE	815,680	933,200	117520	14.4	11752
52	BUILDING MATERIALS & GARDEN SUPPLIES	27,200	30,700	3500	12.9	350
53	GENERAL MERCHANDISE STORES	128,550	142,000	13450	10.5	1345
531	Department stores	115,050	128,000	12950	11.3	1295
	Other general merchandise stores	13,500	14,000	500	3.7	50
54	FOOD STORES	143,530	163,400	19870	13.8	1987
541	Grocery stores	119,790	136,000	16210	13.5	1621
	Other food stores	23,740	27,400	3660	15.4	366
55	AUTOMOTIVE DEALERS & SERVICE STATIONS	85,300	93,300	8000	9.4	800
56	APPAREL & ACCESSORY STORES	46,800	50,100	3300	7.1	330
57	FURNITURE & HOME FURNISHINGS STORES	30,500	33,900	3400	11.1	340
58	EATING & DRINKING PLACES	246,900	300,000	53100	21.5	5310
59	MISCELLANEOUS RETAIL	106,900	119,800	12900	12.1	1290
60-67	FINANCE, INSURANCE & REAL ESTATE	262,500	304,300	41800	15.9	4180
60	BANKING	84,200	95,800	11600	13.8	1160
602	Commercial & stock savings banks	77,300	86,000	10700	13.8	1070
	Other banking	6,900	7,800	900	13.0	90
61	CREDIT AGENCIES OTHER THAN BANKS	25,900	31,500	5600	21.6	560
62	SECURITY, COMMODITY BROKERS & SERVICES	11,600	14,200	2600	22.4	260
63	INSURANCE CARRIERS	74,700	85,500	10800	14.5	1080
631	Life insurance	29,300	32,200	2900	9.9	290
633	Fire, marine & casualty insurance	29,800	33,000	3200	10.7	320
	Other insurance carriers	15,600	20,300	4700	30.1	470

TABLE 20 (Cont.)
PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
64	INSURANCE AGENTS, BROKERS & SERVICE	22,650	26,500	3850	17.0	385
65	REAL ESTATE	37,400	42,300	4900	13.1	490
66	COMBINED REAL ESTATE, INSURANCE, ETC.	800	900	100	12.5	10
67	HOLDING & OTHER INVESTMENT OFFICES	5,250	7,600	2350	44.8	235
70-89	SERVICES	1,171,120	1,448,400	277280	23.7	27728
70	HOTELS & OTHER LODGING PLACES	51,200	61,400	10200	19.9	1020
72	PERSONAL SERVICES	49,180	56,700	7520	15.3	752
73	BUSINESS SERVICES	187,100	267,000	79900	42.7	7990
75	AUTOMOTIVE REPAIR, SERVICES & GARAGES	33,120	38,000	4880	14.7	488
76	MISCELLANEOUS REPAIR SERVICES	14,630	18,800	4170	28.5	417
78	MOTION PICTURES	5,630	5,600	-30	-0.5	-3
79	AMUSEMENT & RECREATION SERVICES	39,000	46,900	7900	20.3	790
80	HEALTH SERVICES [Excl. State & Local government-run hospitals]	387,200	481,500	94300	24.4	9430
805	Nursing & personal care facilities	64,800	91,000	26200	40.4	2620
806	Hospitals	216,700	245,000	28300	13.1	2830
	Other health services	105,700	145,500	39800	37.7	3980
81	LEGAL SERVICES	31,400	42,000	10600	33.8	1060
82	EDUCATIONAL SERVICES [excl. State & Local govt.-run schools,colleges & univ.]	138,400	154,400	16000	11.6	1600
83	SOCIAL SERVICES	69,250	91,500	22250	32.1	2225
84	MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS	1,770	1,800	30	1.7	3

TABLE 20 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
86	MEMBERSHIP ORGANIZATIONS	94,070	98,100	4030	4.3	403
89	MISCELLANEOUS SERVICES	53,300	63,700	10400	19.5	1040
	OTHER SERVICES	15,870	21,000	5130	32.3	513
	GOVERNMENT	679,600	687,000	7400	1.1	740
	FEDERAL GOVERNMENT	137,800	136,000	-1800	-1.3	-180
	Post office	39,700	40,000	300	0.8	30
	Other Federal Government	98,100	96,000	-2100	-2.1	-210
	STATE GOVERNMENT	147,500	151,000	3500	2.4	350
	State education	38,990	42,500	3510	9.0	351
	Other State Government	108,510	108,500	-10	.0	-1
	LOCAL GOVERNMENT	394,300	400,000	5700	1.4	570
	Local education	230,010	238,500	8490	3.7	849
	Other Local Government	164,290	161,500	-2790	-1.7	-279

SOURCE: Bureau of Research and Statistics, Pa. Dept. of Labor and Industry

C. Income and Wage Characteristics and Trends

Personal income is income received from all sources by residents. These sources include wages, salaries, unemployment insurance benefits, property income, dividends, royalties, and other business income. Dividing total personal income for a year by the state's total resident population for that year yields per capita personal income. Thus, per capita income applies to each individual regardless of age or labor force participation. Table 21 provides a historical view of county, state and national per capita income through the 1970s. Total personal income as well as per capita income for 1983 through 1986 for Pennsylvania and all counties is shown in Table 22. This is the latest year (1986) for which county per capita income figures are available. Twelve counties, led by Montgomery County with $21,174, ranked above the 1986 Pennsylvania per capita personal income of $14,247. All of these counties were from metropolitan areas, while the rural and mountainous counties from the north and southcentral sections of the state were ranked the lowest. These included Bedford County at $10,118, Tioga County at $9,928, Potter County at $9,858, Fulton County at $9,685, and Huntingdon County at $9,672.

Although 1986 is the latest year for which county per capita income figures are available, Table 23 gives comparisons by state for 1987. Pennsylvania, at $15,212 per year, ranked twentieth among the 50 states and fell $269 short of the national average of $15,481. The highest per capita income in 1987 was in Connecticut ($21,366), while the lowest was in Mississippi ($10,292). Between 1980 and 1987 Pennsylvania's per capita income increased by 53.8 percent, slightly less than the national average of 56.1 percent. The fastest rates of increase for the eight-year period were in Massachusetts (80.4 percent) and New Hampshire (79.1 percent), while the lowest was in Wyoming (12.1 percent), the only state whose per capita income increase was less than 31 percent during that period. Georgia had the fifth largest percent increase; however, it ranked twenty-eighth in per capita income.

Table 24 gives 1987 average annual wages for Metropolitan Statistical Areas (MSAs) and counties in Pennsylvania. These data, which are based on total payroll for unemployment compensation-insured workers plus federal workers divided by the number of employes, differs from the per capita income figures in Tables 21 and 22, which consist of all income (not just payroll wages and salaries) divided by total population (not just employed workers). The Pennsylvania portion of the Philadelphia PMSA posted the highest annual wages among Pennsylvania's 15 Metropolitan Statistical Areas. This 1987 average was $22,772, well above the state average of $20,408. It was closely followed by wages of $21,018 and $19,979 posted by Pittsburgh PMSA and Reading MSA. The lowest MSA average was $16,258 in the Altoona MSA.

Table 25 offers national median weekly earnings of wage and salary workers for 1986. These figures are useful as comparisons with local wage rates.

Table 26 presents data obtained via records of employers reporting wages for unemployment compensation purposes. Presented in this table are annual average employment and wage information by major industry group for the state of Pennsylvania for the year 1987.

Pennsylvania's goods-producing industries are ranked in Table 27 in order of their 1987 average weekly earnings. The 1987 rankings are compared with data ten years earlier. The highest 1987 weekly earnings were reported in electric, gas and sanitary service, where the average worker earned $645.64 per week, an increase of $310.90 over the ten-year period. The lowest weekly wage was $182.21 in the general merchandise stores line, representing a gain of $69.79 or 62.1 percent from 1977. The fastest rate of earnings increase over this ten-year period was the 97.6 percent rise in chemical products manufacturing. The average manufacturing employe in Pennsylvania earned $408.18 per week in 1987, a ten-year gain of $177.10 or 76.6 percent. In general, earnings were significantly higher in the durable goods sector, where the average was $447.91 per week, than in nondurable goods, where the average was only $358.59.

Table 28 shows earnings growth in Pennsylvania's manufacturing industries for the period 1967 through 1987, plus the first six months of 1988, adjusted for inflation. As the table and Graph 3 show, there has been comparatively little growth in actual purchasing power over the past 19 years. Although factory workers' earnings were at an all-time high of $421.48 in June 1988, their purchasing power in 1982-84 dollars was only $357.19, an increase of only $20.30 or 6.0 percent from 1967. Pennsylvania's real earnings increased substantially during the 1970s, peaking at $390.80 (in 1982-84 dollars) during 1978, then falling to $343.41 in 1987 and rising to $359.31 in 1987. This pattern of increases and decreases in earnings potential is sometimes linked directly to the pattern of employment shifts in the manufacturing sector, however, in actuality, earnings and employment often move in opposite directions, as can be observed by the rise in average wages following a sizeable layoff in an industry. The increase in average wages does not come from employes being given raises but rather from the layoff of workers with little seniority and therefore comparatively lower wages, leaving a higher average wage among those who remain. In this case, however, the drop in both earnings and employment in the 1980s reflects the impact of a pair of national recessions, which resulted in large-scale layoffs, reduction of companies' operating costs, and the negotiation of wage-and-benefit concession contracts with the unions.

Table 29 compares average weekly earnings; average weekly hours and average hourly earnings of employes in manufacturing industries within Pennsylvania's Metropolitan Statistical Areas. The table reveals that during the second quarter of 1988 (latest available) the longest work week occurred in the York MSA and averaged 42.6 hours. The Scranton/Wilkes-Barre MSA displayed the shortest work week at 38.7 hours. The highest weekly earnings were in the Sharon MSA where the average factory worker took home $474.01 per week. The Pittsburgh PMSA was second with earnings averaging $472.08. These high earnings levels are the result of the prominence of the steel industry in both areas. Although the industry has suffered sizeable employment losses, and the unions have had to agree to wage concessions, the large steel industry payroll still makes both areas the state's manufacturing wage leaders.

TABLE 21

TOTAL PER CAPITA INCOME BY COUNTY: 1970-1982
(Pennsylvania And U.S. Included For Comparison)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Adams	3,739	3,922	4,250	4,646	5,137	5,523	6,321	6,915	7,601	8,447	9,291	9,992	10,430
Allegheny	4,383	4,606	5,002	5,503	6,182	6,791	7,448	8,191	9,050	10,052	11,096	12,349	12,965
Armstrong	3,213	3,428	3,847	4,200	4,755	5,358	6,000	6,649	7,150	7,971	8,881	9,525	9,809
Beaver	3,559	3,711	4,054	4,581	5,414	5,944	6,527	7,343	8,243	9,286	10,098	10,987	10,878
Bedford	2,991	3,225	3,428	3,776	4,100	4,448	4,990	5,463	6,054	6,700	7,395	8,049	8,348
Berks	4,155	4,376	4,830	5,320	5,859	6,262	6,965	7,774	8,636	9,629	10,677	11,723	12,325
Blair	3,400	3,551	3,788	4,225	4,630	5,070	5,706	6,266	6,850	7,553	8,193	8,869	9,120
Bradford	3,221	3,254	3,671	4,114	4,487	4,647	5,143	5,538	6,326	7,077	7,643	8,543	8,818
Bucks	4,190	4,429	4,852	5,319	5,910	6,302	7,022	7,781	8,744	9,858	10,971	11,995	12,655
Butler	3,699	3,914	4,143	4,628	5,198	5,641	6,113	6,792	7,567	8,526	9,341	10,191	10,500
Cambria	3,192	3,392	3,776	4,219	4,817	5,473	5,958	6,483	7,071	7,955	8,593	9,250	9,504
Cameron	3,973	3,955	4,008	4,502	5,067	5,094	5,502	6,217	6,860	7,600	8,376	8,959	8,438
Carbon	3,292	3,530	3,903	4,353	4,771	5,188	5,757	6,330	7,014	7,897	8,788	9,510	10,017
Centre	2,998	3,183	3,427	3,866	4,181	4,661	5,133	5,572	6,225	6,964	7,785	8,425	9,030
Chester	4,768	5,020	5,457	6,077	6,692	7,179	8,065	8,869	9,915	11,110	12,168	13,228	14,124
Clarion	3,332	3,492	3,761	4,262	4,792	5,454	5,953	6,591	7,325	7,922	8,484	9,119	9,458
Clearfield	3,082	3,308	3,595	4,025	4,556	5,067	5,580	6,257	6,897	7,616	8,322	9,096	9,631
Clinton	3,084	3,291	3,619	4,134	4,540	4,898	5,449	5,895	6,737	7,517	7,695	8,339	8,605
Columbia	3,413	3,561	3,964	4,436	4,880	5,101	5,566	5,990	6,649	7,384	7,991	8,745	9,203
Crawford	3,443	3,612	3,876	4,288	4,674	5,099	5,556	6,131	6,739	7,483	8,038	8,791	8,820
Cumberland	4,202	4,477	4,916	5,396	5,936	6,339	7,069	7,677	8,374	9,147	9,814	10,760	11,499
Dauphin	4,140	4,454	4,883	5,388	5,964	6,457	7,022	7,580	8,254	8,970	9,816	10,767	11,493
Delaware	4,599	4,781	5,152	5,680	6,281	6,743	7,428	8,131	9,036	10,244	11,565	12,850	13,709
Elk	3,479	3,614	3,901	4,418	4,941	5,131	5,949	6,726	7,427	8,312	8,981	9,927	10,651
Erie	3,842	4,091	4,387	4,881	5,466	5,813	6,193	6,809	7,607	8,388	9,086	9,929	10,268
Fayette	3,102	3,334	3,590	4,015	4,472	4,945	5,419	5,942	6,525	7,329	8,252	8,932	9,195
Forest	2,970	3,152	3,386	3,846	4,185	4,656	5,213	5,650	6,104	7,114	7,825	8,683	8,936
Franklin	3,717	3,819	4,271	4,775	5,268	5,665	6,099	6,639	7,411	8,123	8,873	9,794	10,183
Fulton	2,631	2,780	3,194	3,599	4,034	4,388	4,678	5,243	5,953	6,899	7,718	8,323	8,306
Greene	2,888	2,994	3,271	3,728	4,051	4,647	5,091	5,545	5,845	6,888	7,724	8,431	8,906
Huntingdon	2,837	3,023	3,230	3,629	4,056	4,370	4,805	5,298	5,938	6,585	7,022	7,657	7,977
Indiana	3,057	3,266	3,568	3,958	4,409	5,033	5,513	6,038	6,720	7,354	7,984	8,647	9,028
Jefferson	3,243	3,501	3,882	4,345	4,857	5,425	5,889	6,530	7,280	7,892	8,631	9,368	9,685
Juniata	3,205	3,376	3,737	4,373	4,747	4,968	5,491	5,927	6,641	7,313	7,816	8,569	9,095
Lackawanna	3,526	3,824	4,176	4,652	4,995	5,369	5,950	6,445	7,100	7,922	8,774	9,617	10,328
Lancaster	4,263	4,380	4,773	5,350	5,742	6,055	6,664	7,301	8,296	9,240	9,917	10,823	11,298
Lawrence	3,542	3,740	4,096	4,557	5,034	5,419	5,928	6,506	7,257	8,052	8,619	9,549	9,370
Lebanon	3,730	3,737	4,116	4,521	5,039	4,647	5,879	6,546	7,138	7,985	8,880	9,621	10,005
Lehigh	4,290	4,588	5,047	5,647	6,232	6,752	7,334	8,040	8,928	9,838	10,854	11,915	12,616
Luzerne	3,525	3,794	4,150	4,625	4,991	5,388	5,896	6,433	7,092	7,851	8,568	9,365	10,052
Lycoming	3,577	3,713	4,097	4,546	4,976	5,350	5,881	6,480	7,200	7,806	8,570	9,419	9,817
McKean	3,632	3,776	4,032	4,494	4,955	5,425	5,977	6,400	7,128	8,028	8,669	9,628	10,062
Mercer	3,617	3,801	4,169	4,673	5,198	5,575	6,098	6,795	7,635	8,415	9,330	10,391	10,310
Mifflin	3,370	3,621	3,830	3,944	4,360	4,704	5,351	5,705	6,287	6,991	7,591	8,227	8,358
Monroe	4,085	4,432	4,851	5,351	5,821	6,229	6,670	7,186	7,728	8,369	9,157	9,931	10,320
Montgomery	5,894	6,121	6,599	7,217	7,950	8,490	9,313	10,215	11,306	12,486	13,692	15,041	16,225
Montour	3,328	3,485	3,903	4,475	4,923	5,521	6,281	6,898	7,555	8,362	9,156	10,558	11,073
Northampton	4,044	4,159	4,577	5,175	5,853	6,320	6,871	7,477	8,281	9,275	10,274	11,312	11,656
Northumberland	3,370	3,526	3,820	4,267	4,614	4,964	5,412	5,892	6,403	7,007	7,817	8,596	9,077
Perry	3,261	3,341	3,615	4,051	4,412	4,780	5,300	5,747	6,405	7,210	7,996	8,583	9,093
Philadelphia	4,073	4,330	4,723	5,095	5,530	6,037	6,511	6,995	7,588	8,233	8,983	9,922	10,646
Pike	3,852	4,178	4,622	5,089	5,458	5,815	6,268	6,866	7,619	8,362	9,160	10,133	10,804
Potter	2,954	3,032	3,198	3,623	4,078	4,300	4,777	5,310	5,875	6,571	7,125	7,892	8,140
Schuylkill	3,467	3,762	4,026	4,538	4,938	5,349	5,914	6,471	6,910	7,610	8,409	9,150	9,741
Snyder	3,516	3,658	3,977	4,523	4,931	5,323	6,131	6,759	7,534	8,324	8,935	9,702	10,049
Somerset	3,098	3,306	3,609	4,075	4,669	5,337	5,920	6,555	7,192	7,971	8,600	9,112	9,337
Sullivan	2,856	2,916	3,215	3,729	4,094	4,404	4,772	5,111	5,816	6,323	7,107	7,775	7,776
Susquehanna	3,214	3,338	3,597	4,088	4,338	4,664	5,030	5,616	6,383	7,020	7,602	8,262	8,888
Tioga	2,999	3,097	3,423	3,770	4,272	4,536	4,954	5,548	6,213	6,861	7,433	8,091	8,303
Union	3,351	3,403	3,779	4,200	4,468	4,754	5,375	5,842	6,562	7,249	7,841	8,673	9,251
Venango	3,760	3,939	4,234	4,778	5,347	5,943	6,675	7,354	8,040	8,864	9,719	11,025	11,254
Warren	3,877	3,992	4,312	4,878	5,369	5,695	6,418	7,081	7,729	8,549	9,191	10,247	10,460
Washington	3,590	3,756	4,108	4,546	5,142	5,696	6,287	6,961	7,654	8,675	9,520	10,412	10,703
Wayne	3,305	3,505	3,967	4,488	4,947	5,206	5,514	6,144	6,765	7,364	8,191	9,164	9,553
Westmoreland	3,669	3,824	4,160	4,604	5,139	5,590	6,197	6,881	7,678	8,657	9,690	10,598	10,997
Wyoming	3,428	3,601	3,919	4,285	4,570	4,992	5,329	5,816	6,513	7,238	7,938	8,544	8,972
York	4,286	4,432	4,873	5,388	5,873	6,253	6,914	7,633	8,551	9,576	10,596	11,573	12,052
PENNSYLVANIA	4,042	4,253	4,627	5,106	5,640	6,101	6,700	7,338	8,109	8,995	9,891	10,869	11,441
UNITED STATES	4,051	4,296	4,665	5,182	5,648	6,073	6,651	7,294	8,136	9,033	9,919	10,949	11,482

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, April 1988.

TABLE 22

PENNSYLVANIA

TOTAL PERSONAL INCOME AND PER CAPITA INCOME
BY COUNTY: 1983-1988

Area Title	Total Personal Income					Per Capita Personal Income				
	Millions of Dollars				% Change	Dollars				1988 Rank in State
	1983	1984	1985	1988	1985-88	1983	1984	1985	1988	
Pennsylvania	142,182.8	151,386.3	160,733.7	188,387.3	5.38	11,954	12,731	13,548	14,247	—
Metropolitan portion	124,010.8	132,079.0	140,463.8	148,263.6	5.55	12,332	13,136	13,998	14,740	—
Nonmetropolitan portion	18,171.8	19,307.2	20,270.1	21,123.7	4.21	9,882	10,514	11,082	11,541	—
Adams	781.0	828.0	885.1	951.7	7.52	10,828	11,841	12,595	13,371	15
Allegheny	18,965.8	19,807.8	20,716.1	21,768.9	5.08	13,323	14,057	14,952	15,648	5
Armstrong	832.0	859.9	921.8	947.8	2.82	10,593	10,930	11,765	12,074	32
Beaver	2,148.6	2,215.4	2,257.6	2,211.0	-2.06	10,885	11,180	11,579	11,443	43
Bedford	420.8	438.0	455.4	483.1	6.08	8,758	9,162	9,589	10,118	63
Berks	4,196.6	4,547.4	4,792.4	5,035.9	5.08	13,299	14,295	15,048	15,889	6
Blair	1,280.3	1,344.8	1,438.9	1,514.3	5.24	9,484	10,070	10,823	11,429	44
Bradford	581.2	627.9	673.4	706.7	4.95	9,100	9,837	10,540	10,997	52
Bucks	6,803.7	7,376.3	8,128.3	8,619.3	6.04	13,574	14,540	15,830	16,510	4
Butler	1,637.0	1,733.3	1,833.3	1,886.6	2.91	10,905	11,509	12,184	12,487	27
Cambria	1,729.5	1,809.8	1,850.1	1,914.5	3.48	9,897	10,187	10,575	11,052	50
Cameron	59.4	62.5	65.1	67.3	3.38	8,852	9,432	9,870	10,377	58
Carbon	561.2	596.3	633.4	651.5	2.86	10,393	11,058	11,747	11,975	35
Centre	1,099.2	1,193.2	1,263.6	1,361.8	7.76	9,623	10,527	11,063	11,886	38
Chester	4,862.1	5,338.0	5,827.4	6,247.7	7.21	15,055	15,981	17,393	18,424	2
Clarion	411.6	441.6	455.0	473.3	4.02	9,502	10,320	10,656	11,105	48
Clearfield	815.7	864.1	883.8	913.2	3.33	9,646	10,398	10,689	11,120	46
Clinton	344.0	362.1	370.0	388.3	5.22	8,781	9,487	9,732	10,230	61
Columbia	600.4	629.1	666.0	698.0	4.80	9,838	10,236	10,808	11,388	45
Crawford	820.5	895.3	939.6	965.3	2.74	9,135	10,020	10,679	11,066	48
Cumberland	2,237.8	2,405.8	2,601.8	2,792.0	7.31	12,138	12,986	13,948	14,702	10
Dauphin	2,815.9	3,007.5	3,185.4	3,391.5	6.47	11,960	12,763	13,459	14,327	12
Delaware	8,008.4	8,603.8	9,338.7	9,922.6	6.25	14,537	15,572	16,806	17,701	3
Elk	421.9	460.4	464.3	472.8	1.83	11,224	12,242	12,384	12,622	24
Erie	2,983.7	3,174.2	3,358.9	3,487.3	4.12	10,567	11,253	12,048	12,524	25
Fayette	1,483.1	1,572.8	1,601.6	1,622.2	1.29	9,361	9,954	10,219	10,414	57
Forest	44.3	46.5	48.6	49.8	2.47	8,669	9,392	9,852	10,341	59
Franklin	1,224.3	1,306.7	1,387.1	1,462.5	4.88	10,592	11,169	11,885	12,323	29
Fulton	115.9	126.6	135.5	135.2	-0.22	8,654	9,328	9,829	9,665	56
Greene	374.2	384.9	403.3	428.4	6.22	9,128	9,612	9,851	10,495	56
Huntingdon	350.0	374.9	392.3	414.5	5.66	8,178	8,773	9,167	9,672	67
Indiana	860.4	917.0	959.3	1,013.8	5.68	9,244	9,908	10,376	10,969	54
Jefferson	493.8	522.1	536.9	557.9	3.53	10,130	10,719	11,158	11,534	41
Juniata	187.6	204.4	216.6	229.7	6.05	9,545	10,237	10,880	11,467	42
Lackawanna	2,488.3	2,596.7	2,775.0	2,933.9	5.73	10,971	11,569	12,422	13,157	18
Lancaster	4,496.2	4,966.5	5,358.5	5,777.2	7.81	11,910	12,986	13,836	14,880	11
Lawrence	1,014.7	1,066.6	1,101.6	1,133.2	2.87	9,562	10,129	10,706	11,119	47
Lebanon	1,169.9	1,247.2	1,327.1	1,400.0	5.49	10,556	11,223	11,901	12,509	26
Lehigh	3,632.1	3,942.5	4,192.9	4,415.0	5.30	13,205	14,221	15,004	15,665	7
Luzerne	3,609.7	3,754.9	3,988.3	4,215.1	5.69	10,678	11,194	11,997	12,729	23
Lycoming	1,190.9	1,271.5	1,342.0	1,423.8	6.08	10,144	10,857	11,535	12,237	30
McKean	516.3	538.3	557.0	577.5	3.68	10,488	10,984	11,553	12,204	31
Mercer	1,304.7	1,372.0	1,409.5	1,443.1	2.38	10,265	10,892	11,365	11,680	38
Mifflin	404.7	435.3	456.1	479.3	5.09	8,685	9,395	9,836	10,321	60
Monroe	829.9	894.2	1,007.5	1,067.1	5.92	11,101	11,877	12,733	12,907	20
Montgomery	11,200.8	12,196.2	13,222.7	14,230.3	7.62	17,111	18,475	19,920	21,174	1
Montour	201.5	213.0	229.8	245.7	6.92	11,872	12,583	13,786	14,726	9
Northampton	2,790.0	2,979.4	3,171.4	3,274.3	3.24	12,177	12,839	13,682	13,984	13
Northumberland	954.2	1,010.1	1,044.6	1,093.1	4.64	9,519	10,073	10,491	10,897	51
Perry	358.3	391.2	423.2	450.7	6.50	9,719	10,469	11,142	11,823	39
Philadelphia	18,445.3	19,388.1	20,489.0	21,872.6	5.78	11,124	11,752	12,436	13,192	17
Pike	231.1	255.8	288.0	307.8	6.44	11,675	12,543	13,602	13,782	14
Potter	154.0	162.0	171.3	180.6	5.43	8,512	8,855	9,399	9,858	65
Schuylkill	1,634.4	1,720.4	1,793.6	1,874.2	4.49	10,348	10,950	11,454	11,985	34
Snyder	380.9	415.9	437.3	470.7	7.64	10,923	11,815	12,321	13,217	16
Somerset	778.7	820.3	839.0	874.1	4.18	9,493	10,016	10,307	10,802	55
Sullivan	52.4	57.6	61.3	64.3	4.89	8,434	9,301	9,781	10,228	62
Susquehanna	353.6	381.0	416.0	438.7	5.46	9,235	9,788	10,577	10,992	53
Tioga	342.8	367.0	386.1	401.6	4.01	8,537	9,139	9,568	9,928	64
Union	327.9	353.1	376.2	402.0	6.86	9,758	10,281	10,933	11,605	40
Venango	715.4	747.0	773.9	796.3	2.89	11,109	11,734	12,335	12,818	22
Warren	510.7	544.2	560.7	595.1	6.48	10,659	11,454	12,481	12,838	21
Washington	2,384.8	2,487.3	2,580.7	2,850.3	2.70	10,987	11,494	12,091	12,473	28
Wayne	380.9	402.0	442.1	467.0	5.63	10,290	10,877	11,602	12,059	33
Westmoreland	4,425.8	4,648.9	4,795.5	4,957.0	3.37	11,329	12,000	12,499	13,009	19
Wyoming	281.0	282.6	306.5	330.0	8.97	9,673	10,325	11,165	11,858	37
York	4,028.2	4,390.0	4,667.4	4,949.2	5.59	12,673	13,640	14,511	15,158	8

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, April 1988

TABLE 23

STATES RANKED ON PER CAPITA INCOME: 1987
Percent Change 1980 to 1987

Rank	State	Per Capita Income	% of U.S.	% Incr. 1980 to 1987	Rank	State	Per Capita Income	% of U.S.	% Incr. 1980 to 1987
1	Connecticut	21,266	137	75.6	25	Nebraska	14,328	93	54.5
	Dist. of Columbia	20,457	132	66.0	26	Arizona	14,315	92	56.1
2	New Jersey	20,352	131	75.9	27	Vermont	14,302	92	66.7
3	Massachusetts	19,142	124	80.4	28	Georgia	14,300	92	71.3
4	Alaska	18,230	118	31.8	29	Iowa	14,236	92	49.3
5	Maryland	18,124	117	68.0	30	Oregon	14,041	91	42.3
6	New York	18,004	116	67.9	31	Maine	13,954	90	69.8
7	California	17,821	115	53.6	32	Indiana	13,914	90	50.5
8	New Hampshire	17,529	113	79.1	33	Texas	13,866	90	41.5
9	Delaware	16,696	108	62.9	34	North Carolina	13,314	86	66.4
10	Virginia	16,517	107	68.1	35	North Dakota	13,004	84	52.3
11	Illinois	16,442	106	51.7	36	Tennessee	12,880	83	60.4
12	Nevada	16,366	106	43.3	37	Wyoming	12,709	82	12.1
13	Minnesota	15,927	103	58.3	38	Oklahoma	12,551	81	33.6
14	Colorado	15,584	101	47.0	39	South Dakota	12,550	81	52.7
15	Hawaii	15,679	101	47.7	40	Montana	12,347	80	38.4
16	Washington	15,599	101	45.4	41	Kentucky	12,059	78	50.3
17	Florida	15,584	101	59.6	42	South Carolina	12,004	78	58.2
18	Rhode Island	15,555	100	63.4	43	Alabama	11,940	77	55.0
	UNITED STATES	15,481	100	56.1	44	New Mexico	11,875	77	45.4
19	Michigan	15,393	99	51.4	45	Idaho	11,868	77	38.5
20	PENNSYLVANIA	15,212	98	53.8	46	Arkansas	11,507	74	54.1
21	Kansas	15,126	98	52.2	47	Louisiana	11,473	74	32.1
22	Wisconsin	14,742	95	49.7	48	Utah	11,366	73	42.9
23	Missouri	14,687	95	58.0	49	West Virginia	11,020	71	39.2
24	Ohio	14,612	94	50.3	50	Mississippi	10,292	66	48.6

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, August 1988.

TABLE 24

1987 AVERAGE ANNUAL WAGES

PENNSYLVANIA 1987 AVERAGE ANNUAL WAGES $20,408

Metropolitan Statistical Area	Average Annual Wage	Metropolitan Statistical Area	Average Annual Wage
Allentown-Bethlehem (Pa. Part)	$ 19,709	Philadelphia(Pa. Part)	$ 22,772
Altoona	16,258	Pittsburgh	21,018
Beaver County	19,739	Reading	19,979
Erie	19,283	Scranton--Wilkes-Barre	16,857
Harrisburg-Lebanon-Carlisle	19,602	Sharon	17,650
Johnstown	16,877	State College	18,275
Lancaster	18,919	Williamsport	17,546
		York	18,737

PENNSYLVANIA COUNTIES

COUNTY	Average Annual Wage	COUNTY	Average Annual Wage	COUNTY	Average Annual Wage
Adams	$ 14,676	Delaware	$ 21,544	Montgomery	$ 23,271
Allegheny	21,795	Elk	19,056	Montour	21,324
Armstrong	18,341	Erie	19,283	Northampton	19,345
Beaver	19,739	Fayette	16,094	Northumberland	16,685
Bedford	14,854	Forest	14,510	Perry	12,716
Berks	19,978	Franklin	17,528	Philadelphia	23,610
Blair	16,258	Fulton	16,435	Pike	14,112
Bradford	18,121	Greene	21,930	Potter	14,446
Bucks	20,217	Huntingdon	15,636	Schuylkill	15,315
Butler	19,485	Indiana	19,198	Snyder	15,580
Cambria	17,546	Jefferson	17,523	Somerset	15,268
Cameron	16,520	Juniata	14,182	Sullivan	13,344
Carbon	14,921	Lackawanna	16,669	Susquehanna	14,338
Centre	18,275	Lancaster	18,919	Tioga	15,505
Chester	22,318	Lawrence	17,255	Union	16,813
Clarion	16,589	Lebanon	16,949	Venango	18,775
Clearfield	16,434	Lehigh	20,374	Warren	17,548
Clinton	16,944	Luzerne	16,756	Washington	19,389
Columbia	16,010	Lycoming	17,546	Wayne	15,262
Crawford	17,553	McKean	17,203	Westmoreland	18,893
Cumberland	19,973	Mercer	17,650	Wyoming	21,370
Dauphin	20,314	Mifflin	17,212	York	19,455
		Monroe	17,092		

NOTE: Average Annual Wages are derived from the ES-202 report of Pennsylvania's insured employment and include Federal Government. The data, on a "place-of-work" basis, are derived by dividing annual payroll by the average employment within each area under consideration.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 25

Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

(Numbers in thousands)

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Total	78,727	$358	46,233	$419	32,494	$290	69.2	41.3
Managerial and professional specialty occupations	20,095	505	11,333	608	8,762	414	68.1	43.6
Executive, administrative, and managerial occupations	9,777	511	5,980	620	3,797	395	63.7	38.8
Administrators and officials, public administration	434	513	259	617	176	414	67.1	40.6
Financial managers	396	584	245	703	150	458	65.1	37.9
Personnel and labor relations managers	109	621	57	759	52	474	62.5	47.7
Purchasing managers	101	633	67	741	33	(1)	(1)	32.7
Managers, marketing, advertising, and public relations	421	680	320	751	101	470	62.6	24.0
Administrators, education and related fields	440	610	255	691	185	495	71.6	42.0
Managers, medicine and health	113	503	45	(1)	67	463	(1)	59.3
Managers, properties and real estate	233	375	109	407	124	343	84.3	53.2
Management-related occupations	3,004	474	1,592	565	1,412	390	69.0	47.0
Accountants and auditors	1,083	478	589	554	493	398	71.8	45.5
Underwriters, and other financial officers	600	500	321	617	279	394	63.9	46.5
Management analysts	102	567	63	673	40	(1)	(1)	39.2
Personnel, training, and labor relations specialists	327	485	148	606	179	411	67.8	54.7
Buyers, wholesale and retail trade, except farm products	177	397	79	501	98	314	62.7	55.4
Inspectors and compliance officers, except construction	181	485	146	508	36	(1)	(1)	19.9
Professional specialty occupations	10,317	500	5,353	599	4,965	428	71.5	48.1
Engineers, architects, and surveyors	1,751	676	1,636	685	115	551	80.4	6.6
Architects	87	577	77	592	10	(1)	(1)	11.5
Engineers	1,644	682	1,540	691	104	580	83.9	6.3
Aerospace engineers	95	708	91	722	4	(1)	(1)	4.2
Chemical engineers	55	721	49	(1)	6	(1)	(1)	10.9
Civil engineers	209	618	202	620	7	(1)	(1)	3.3
Electrical and electronic engineers	511	704	471	715	40	(1)	(1)	7.8
Industrial engineers	191	628	173	647	19	(1)	(1)	9.9
Mechanical engineers	283	687	272	695	11	(1)	(1)	3.9
Mathematical and computer scientists	588	628	375	696	213	521	74.9	36.2
Computer systems analysts and scientists	337	631	219	687	118	537	78.2	35.0
Operations and systems researchers and analysts	203	617	127	695	77	511	73.5	37.9
Natural scientists	339	570	265	603	74	471	78.1	21.8
Chemists, except biochemists	116	601	92	624	24	(1)	(1)	20.7
Biological and life scientists	59	503	37	(1)	22	(1)	(1)	37.3
Health diagnosing occupations	254	653	188	722	66	499	69.1	26.0
Physicians	219	653	160	728	59	505	69.4	26.9
Health assessment and treating occupations	1,464	456	243	497	1,220	449	90.3	83.3
Registered nurses	1,068	460	84	490	984	458	93.5	92.1
Pharmacists	109	607	71	613	38	(1)	(1)	34.9
Dietitians	53	336	3	(1)	50	342	(1)	94.3
Therapists	195	404	58	415	136	400	96.4	69.7
Inhalation therapists	64	386	28	(1)	36	(1)	(1)	56.3
Teachers, college and university	443	600	322	656	122	479	73.0	27.5
Teachers, except college and university	2,884	437	836	501	2,048	411	82.0	71.0
Teachers, prekindergarten and kindergarten	240	274	4	(1)	236	279	(1)	98.3
Teachers, elementary school	1,173	422	172	490	1,001	415	84.7	85.3
Teachers, secondary school	1,076	481	518	508	558	443	87.2	51.9
Teachers, special education	198	424	29	(1)	169	417	(1)	85.4
Counselors, educational and vocational	146	494	72	535	74	471	88.0	50.7
Librarians, archivists, and curators	150	425	27	(1)	123	410	(1)	82.0
Librarians	139	423	21	(1)	118	408	(1)	84.9
Social scientists and urban planners	229	569	131	683	98	470	68.8	42.8
Economists	96	704	59	794	37	(1)	(1)	38.5
Psychologists	100	491	51	581	49	(1)	(1)	49.0
Social, recreation, and religious workers	750	389	413	420	337	350	83.3	44.9
Social workers	423	399	163	451	260	369	81.8	61.5
Recreation workers	60	232	23	(1)	37	(1)	(1)	61.7
Clergy	226	396	210	400	16	(1)	(1)	7.1
Lawyers and judges	342	767	256	812	85	609	75.0	24.9
Lawyers	314	767	234	806	79	624	77.4	25.2
Writers, artists, entertainers, and athletes	979	455	589	504	390	374	74.2	39.8
Designers	292	490	182	574	110	350	61.0	37.7
Actors and directors	55	423	32	(1)	23	(1)	(1)	41.8
Painters, sculptors, craft artists, and artist printmakers	86	385	49	(1)	36	(1)	(1)	41.9
Photographers	59	392	42	(1)	17	(1)	(1)	28.8
Editors and reporters	199	425	107	480	92	373	77.7	46.2
Public relations specialists	130	518	67	698	63	440	63.0	48.5
Technical, sales, and administrative support occupations	24,060	320	8,977	437	15,083	282	64.5	62.7
Technicians and related support occupations	2,821	416	1,597	490	1,224	343	70.0	43.4
Health technologists and technicians	852	328	187	405	665	317	78.3	80.4
Clinical laboratory technologists and technicians	239	388	68	436	170	371	85.1	71.1
Radiologic technicians	94	383	32	(1)	62	367	(1)	66.0
Licensed practical nurses	281	300	9	(1)	272	299	(1)	96.8

See footnotes at end of table

Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female-male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Engineering and related technologists and technicians	843	$447	699	$471	144	$356	75.6	17.1
Electrical and electronic technicians	303	477	265	493	38	(1)	(1)	12.5
Drafting occupations	248	412	198	431	50	351	81.4	20.2
Surveying and mapping technicians	74	381	67	375	6	(1)	(1)	8.1
Science technicians	178	423	133	479	45	(1)	(1)	25.3
Chemical technicians	72	459	57	486	16	(1)	(1)	22.2
Technicians, except health, engineering, and science	949	499	598	548	351	424	77.4	37.0
Airplane pilots and navigators	54	754	53	760	1	(1)	(1)	1.9
Computer programmers	503	519	332	559	172	477	85.3	34.2
Legal assistants	145	372	34	(1)	111	361	(1)	76.6
Sales occupations	7,395	351	4,373	447	3,021	239	53.5	40.9
Supervisors	2,103	392	1,436	460	667	282	61.3	31.7
Sales representatives, finance and business services	1,388	453	789	519	599	360	69.4	43.2
Insurance sales	358	418	225	500	133	352	70.4	37.2
Real estate sales	326	457	145	518	181	389	75.1	55.5
Securities and financial services sales	215	608	164	740	52	423	57.2	24.2
Advertising and related sales	107	454	52	502	54	373	74.3	50.5
Sales occupations, other business services	382	397	203	487	178	315	64.7	46.6
Sales representatives, commodities, except retail, including sales engineers	1,226	492	1,017	508	209	382	75.2	17.0
Salesworkers, retail and personal services	2,660	215	1,122	301	1,538	183	60.8	57.8
Salesworkers, motor vehicles and boats	237	424	220	439	17	(1)	(1)	7.2
Salesworkers, apparel	166	192	40	(1)	126	174	(1)	75.9
Salesworkers, furniture and home furnishings	112	302	65	318	47	(1)	(1)	42.0
Salesworkers, radio, television, hi-fi, and appliances	107	304	84	313	24	(1)	(1)	22.4
Salesworkers, hardware and building supplies	135	267	105	292	30	(1)	(1)	22.2
Salesworkers, parts	155	274	140	286	14	(1)	(1)	9.0
Sales counter clerks	76	193	22	(1)	54	170	(1)	71.1
Cashiers	957	181	197	209	760	174	83.3	79.4
Street and door-to-door salesworkers	72	343	32	(1)	40	(1)	(1)	55.6
Administrative support occupations, including clerical	13,844	300	3,006	403	10,838	284	70.5	78.3
Supervisors, administrative support	709	424	296	521	413	385	73.9	58.3
Supervisors, general office	416	404	139	515	278	373	72.4	66.8
Supervisors, financial records processing	91	472	24	(1)	67	413	(1)	73.6
Supervisors, distribution, scheduling, and adjusting clerks	153	447	105	471	48	(1)	(1)	31.4
Computer equipment operators	722	318	236	396	486	296	74.7	67.3
Computer operators	716	318	234	396	482	296	74.7	67.3
Secretaries, stenographers, and typists	3,893	287	65	322	3,828	286	88.8	98.3
Secretaries	3,210	288	34	(1)	3,176	287	(1)	98.9
Typists	651	276	28	(1)	623	276	(1)	95.7
Information clerks	856	255	91	347	766	250	72.0	89.5
Interviewers	123	274	16	(1)	107	266	(1)	87.0
Hotel clerks	60	214	18	(1)	42	(1)	(1)	70.0
Transportation ticket and reservation agents	99	420	29	(1)	70	366	(1)	70.7
Receptionists	459	242	9	(1)	450	242	(1)	98.0
Records processing occupations, except financial	611	288	118	342	492	279	81.6	80.5
Order clerks	174	366	51	404	123	348	86.1	70.7
Personnel clerks, except payroll and timekeeping	53	317	5	(1)	48	(1)	(1)	90.6
Library clerks	54	248	8	(1)	46	(1)	(1)	85.2
File clerks	211	239	32	(1)	179	237	(1)	84.8
Records clerks	101	303	21	(1)	80	292	(1)	79.2
Financial records processing occupations	1,706	290	169	366	1,536	286	78.1	90.0
Bookkeepers, accounting and auditing clerks	1,319	287	127	343	1,193	283	82.5	90.4
Payroll and timekeeping clerks	149	316	14	(1)	135	313	(1)	90.6
Billing clerks	135	294	14	(1)	121	286	(1)	89.6
Cost and rate clerks	71	291	13	(1)	58	276	(1)	81.7
Duplicating, mail, and other office machine operators	60	266	28	(1)	33	(1)	(1)	55.0
Communications equipment operators	191	307	28	(1)	163	296	(1)	85.3
Telephone operators	181	315	25	(1)	157	304	(1)	86.7
Mail and message distributing occupations	754	445	520	465	234	405	87.1	31.0
Postal clerks, except mail carriers	274	479	164	484	110	467	96.5	40.1
Mail carriers, postal service	280	477	229	482	51	429	89.0	18.2
Mail clerks, except postal service	119	268	62	291	58	247	84.9	48.7
Messengers	81	271	65	279	16	(1)	(1)	19.8
Material recording, scheduling, and distributing clerks	1,455	322	908	359	547	285	79.4	37.6
Dispatchers	166	347	82	402	84	307	76.4	50.6
Production coordinators	178	458	100	506	78	346	68.4	43.8
Traffic, shipping, and receiving clerks	421	297	312	317	108	243	76.7	25.7
Stock and inventory clerks	479	315	299	347	180	285	82.1	37.6
Weighers, measurers, and checkers	65	279	39	(1)	26	(1)	(1)	40.0
Expediters	91	318	37	(1)	54	283	(1)	59.3
Adjusters and investigators	743	321	203	460	540	299	65.0	72.7
Insurance adjusters, examiners, and investigators	238	356	75	487	163	308	63.2	68.5
Investigators and adjusters, except insurance	334	323	89	465	244	301	64.7	73.1
Eligibility clerks, social welfare	64	300	7	(1)	58	291	(1)	90.6
Bill and account collectors	107	284	32	(1)	75	281	(1)	70.1

See footnotes at end of table.

Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Miscellaneous administrative support occupations	2,144	$272	345	$375	1,800	$262	69.9	84.0
General office clerks	548	283	123	373	425	267	71.6	77.6
Bank tellers	363	231	34	(1)	329	228	(1)	90.6
Data entry keyers	290	277	21	(1)	269	273	(1)	92.8
Statistical clerks	88	343	19	(1)	69	327	(1)	78.4
Teachers aides	180	198	9	(1)	171	197	(1)	95.0
Service occupations	8,061	223	3,987	284	4,074	191	67.3	50.5
Private household occupations	334	121	14	(1)	320	119	(1)	95.8
Child care workers, private household	148	91	2	(1)	146	90	(1)	98.6
Private household cleaners and servants	157	147	9	(1)	149	146	(1)	94.9
Protective service occupations	1,589	392	1,433	402	156	292	72.6	9.8
Supervisors, protective service occupations	165	516	158	528	8	(1)	(1)	4.8
Supervisors, police and detectives	89	558	83	575	5	(1)	(1)	5.6
Firefighting and fire prevention occupations	222	455	217	461	4	(1)	(1)	1.8
Firefighting occupations	209	464	205	469	4	(1)	(1)	1.9
Police and detectives	648	431	579	443	69	350	79.0	10.6
Police and detectives, public service	392	478	367	481	24	(1)	(1)	6.1
Sheriffs, bailiffs, and other law enforcement officers	80	401	71	410	10	(1)	(1)	12.5
Correctional institution officers	176	362	142	370	34	(1)	(1)	19.3
Guards	554	266	479	272	75	231	84.9	13.5
Guards and police, except public services	516	272	456	275	59	254	92.4	11.4
Service occupations, except protective and household	6,138	209	2,540	239	3,598	195	81.6	58.6
Food preparation and service occupations	2,288	186	973	205	1,315	173	84.4	57.5
Supervisors, food preparation and service	177	238	68	294	109	212	72.1	61.6
Bartenders	184	214	100	245	84	184	75.1	45.7
Waiters and waitresses	576	172	108	209	472	168	80.4	81.9
Cooks, except short order	817	196	447	212	370	174	82.1	45.3
Food counter, fountain and related occupations	78	152	16	(1)	62	149	(1)	79.5
Kitchen workers, food preparation	64	166	15	(1)	49	(1)	(1)	76.6
Waiters' waitresses' assistants	95	164	65	162	29	(1)	(1)	30.5
Health service occupations	1,277	216	145	252	1,132	213	84.5	88.6
Dental assistants	112	243	0	(1)	112	243	(1)	100.0
Health aides, except nursing	254	242	43	(1)	212	241	(1)	83.5
Nursing aides, orderlies, and attendants	910	206	102	253	808	202	79.8	88.8
Cleaning and building service occupations, except household	1,883	238	1,236	266	647	197	74.1	34.4
Supervisors, cleaning and building service workers	130	313	89	348	42	(1)	(1)	32.3
Maids and housemen	363	189	71	229	292	178	77.7	80.4
Janitors and cleaners	1,338	247	1,029	261	309	207	79.3	23.1
Personal service occupations	691	212	187	255	504	203	79.6	72.9
Hairdressers and cosmetologists	274	208	40	(1)	234	205	(1)	85.4
Attendants, amusement and recreation facilities	63	234	36	(1)	27	(1)	(1)	42.9
Child care workers, except private household	143	182	11	(1)	132	177	(1)	92.3
Precision production, craft, and repair occupations	10,851	408	9,973	418	878	277	66.3	8.1
Mechanics and repairers	3,723	414	3,588	413	136	431	104.4	3.7
Supervisors, mechanics and repairers	219	524	199	523	20	(1)	(1)	9.1
Mechanics and repairers, except supervisors	3,504	408	3,388	408	116	420	102.9	3.3
Vehicle and mobile equipment mechanics and repairers	1,444	375	1,426	375	19	(1)	(1)	1.3
Automobile mechanics	658	324	647	326	10	(1)	(1)	1.5
Bus, truck, and stationary engine mechanics	310	402	307	402	3	(1)	(1)	1.0
Aircraft engine mechanics	96	505	94	508	3	(1)	(1)	3.1
Small engine repairers	52	301	52	301	0	(1)	(1)	.0
Automobile body and related repairers	130	354	129	355	0	(1)	(1)	.0
Heavy equipment mechanics	157	438	156	437	1	(1)	(1)	.6
Industrial machinery repairers	515	415	502	417	13	(1)	(1)	2.5
Electrical and electronic equipment repairers	642	511	584	514	58	486	94.6	9.0
Electronic repairers, communications and industrial equipment	131	450	121	447	9	(1)	(1)	6.9
Data processing equipment repairers	127	514	115	531	11	(1)	(1)	8.7
Telephone line installers and repairers	64	549	60	547	4	(1)	(1)	6.3
Telephone installers and repairers	220	568	191	571	29	(1)	(1)	13.2
Heating, air conditioning, and refrigeration mechanics	214	390	213	389	1	(1)	(1)	.5
Miscellaneous mechanics and repairers	655	403	631	404	23	(1)	(1)	3.5
Office machine repairers	54	376	54	376	0	(1)	(1)	.0
Millwrights	93	501	91	501	2	(1)	(1)	2.2
Construction trades	3,469	401	3,413	401	56	333	83.0	1.6
Supervisors, construction occupations	420	500	413	500	6	(1)	(1)	1.4
Construction trades, except supervisors	3,049	389	2,999	389	50	315	81.0	1.6
Brickmasons and stonemasons	114	412	113	411	0	(1)	(1)	.0
Carpet installers	53	331	52	328	0	(1)	(1)	.0
Carpenters	855	348	846	349	9	(1)	(1)	1.1
Drywall installers	101	374	99	375	2	(1)	(1)	2.0
Electricians	562	473	551	475	12	(1)	(1)	2.1
Electrical power installers and repairers	106	514	104	515	2	(1)	(1)	1.9
Painters, construction and maintenance	267	299	257	301	10	(1)	(1)	3.7

See footnotes at end of table

Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Plumbers, pipefitters, steamfitters, and apprentices	376	$470	374	$470	2	(1)	(1)	.5
Concrete and terrazzo finishers	68	343	67	341	1	(1)	(1)	1.5
Insulation workers	53	369	52	363	1	(1)	(1)	1.9
Roofers	120	303	118	303	2	(1)	(1)	1.7
Structural metalworkers	65	467	65	467	0	(1)	(1)	0
Extractive occupations	155	520	152	517	2	(1)	(1)	1.3
Precision production occupations	3,504	403	2,821	445	684	$258	58.0	19.5
Supervisors, production occupations	1,308	474	1,127	495	181	297	60.0	13.8
Precision metalworking occupations	862	432	814	441	48	(1)	(1)	5.6
Tool and die makers	151	506	149	508	2	(1)	(1)	1.3
Machinists	468	410	450	422	18	(1)	(1)	3.8
Sheet metal workers	128	408	120	410	8	(1)	(1)	6.3
Precision woodworking occupations	67	285	55	289	11	(1)	(1)	16.4
Precision textile, apparel, and furnishings machine workers	134	242	73	259	61	211	78.7	45.5
Precision workers, assorted materials	471	284	194	325	277	259	78.7	58.8
Electrical and electronic equipment assemblers	311	271	98	305	213	255	83.6	68.5
Precision food production occupations	336	293	254	327	82	208	63.6	24.4
Butchers and meatcutters	241	299	192	338	49	(1)	(1)	20.3
Bakers	69	292	51	316	18	(1)	(1)	26.1
Precision inspectors, testers, and related workers	104	463	86	481	18	(1)	(1)	17.3
Inspectors, testers, and graders	99	468	82	483	17	(1)	(1)	17.2
Plant and system operators	223	483	218	483	5	(1)	(1)	2.2
Stationary engineers	103	483	102	483	1	(1)	(1)	1.0
Operators, fabricators, and laborers	14,342	301	10,784	332	3,558	225	67.8	24.8
Machine operators, assemblers, and inspectors	7,254	290	4,401	354	2,853	223	63.0	39.3
Machine operators and tenders, except precision	4,815	278	2,873	341	1,942	211	61.9	40.3
Metalworking and plastic working machine operators	476	361	392	379	84	271	71.5	17.6
Lathe and turning machine operators	61	383	57	388	4	(1)	(1)	6.6
Punching and stamping press machine operators	140	327	95	352	45	(1)	(1)	32.1
Grinding, abrading, buffing, and polishing machine operators	142	366	124	378	18	(1)	(1)	12.7
Metal and plastic processing machine operators	167	324	126	365	40	(1)	(1)	24.0
Molding and casting machine operators	99	305	67	354	32	(1)	(1)	32.3
Woodworking machine operators	137	258	114	283	22	(1)	(1)	16.1
Sawing machine operators	90	260	77	264	12	(1)	(1)	13.3
Printing machine operators	404	354	303	384	101	282	71.6	25.0
Printing machine operators	274	366	240	381	34	(1)	(1)	12.4
Typesetters and compositors	57	323	17	(1)	40	(1)	(1)	70.2
Textile, apparel, and furnishings machine operators	1,155	195	225	247	930	186	75.3	80.5
Winding and twisting machine operators	82	237	19	(1)	64	220	(1)	78.0
Textile sewing machine operators	678	175	69	205	607	177	86.3	89.8
Pressing machine operators	108	199	33	(1)	75	182	(1)	69.4
Laundering and dry cleaning machine operators	137	194	43	(1)	94	175	(1)	68.6
Machine operators, assorted materials	2,450	305	1,696	343	754	239	69.7	30.8
Packaging and filling machine operators	367	253	141	324	227	230	71.0	61.9
Mixing and blending machine operators	87	342	81	345	6	(1)	(1)	6.9
Separating, filtering, and clarifying machine operators	61	431	53	446	8	(1)	(1)	13.1
Painting and paint spraying machine operators	174	310	141	329	33	(1)	(1)	19.0
Furnace, kiln, and oven operators, except food	108	421	106	425	4	(1)	(1)	3.7
Crushing and grinding machine operators	54	243	42	(1)	12	(1)	(1)	22.2
Slicing and cutting machine operators	216	270	165	288	51	209	72.6	23.6
Photographic process machine operators	60	253	28	(1)	32	(1)	(1)	53.3
Fabricators, assemblers, and hand working occupations	1,659	319	1,131	365	527	251	68.8	31.8
Welders and cutters	534	378	499	382	34	(1)	(1)	6.4
Assemblers	1,001	289	567	350	434	254	72.6	43.4
Production inspectors, testers, samplers, and weighers	780	323	396	421	384	260	61.8	49.2
Production inspectors, checkers, and examiners	653	334	321	438	332	266	60.7	50.8
Production testers	51	420	39	(1)	12	(1)	(1)	23.5
Graders and sorters, except agricultural	70	230	33	(1)	37	(1)	(1)	52.9
Transportation and material moving occupations	3,684	366	3,494	372	190	287	77.2	5.2
Motor vehicle operators	2,577	346	2,426	353	151	275	77.9	5.9
Supervisors, motor vehicle operators	57	462	47	(1)	10	(1)	(1)	17.5
Truckdrivers, heavy	1,539	371	1,516	371	23	(1)	(1)	1.5
Truckdrivers, light	459	281	432	287	27	(1)	(1)	5.9
Drivers-salesworkers	188	395	179	400	9	(1)	(1)	4.8
Bus drivers	201	327	129	389	71	286	73.3	35.3
Taxicab drivers and chauffeurs	107	272	97	274	10	(1)	(1)	9.3
Transportation occupations, except motor vehicles	186	580	181	583	4	(1)	(1)	2.2
Rail transportation occupations	133	589	130	593	3	(1)	(1)	2.3
Locomotive operating occupations	57	625	57	630	1	(1)	(1)	1.8
Water transportation occupations	51	547	51	545	1	(1)	(1)	2.0
Material moving equipment operators	922	375	887	377	36	(1)	(1)	3.9
Operating engineers	155	410	154	410	1	(1)	(1)	.6
Crane and tower operators	86	459	84	458	1	(1)	(1)	1.2
Excavating and loading machine operators	81	368	80	366	1	(1)	(1)	1.2

See footnotes at end of table

Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Grader, dozer, and scraper operators	90	$351	87	$345	3	(1)	(1)	3.3
Industrial truck and tractor equipment operators	381	325	361	327	20	(1)	(1)	5.2
Handlers, equipment cleaners, helpers, and laborers	3,404	263	2,890	271	515	$226	83.4	15.1
Helpers, construction and extractive occupations	161	240	158	237	4	(1)	(1)	2.5
Helpers, construction trades	143	236	139	233	4	(1)	(1)	2.8
Construction laborers	642	287	624	288	18	(1)	(1)	2.8
Production helpers	59	271	44	(1)	15	(1)	(1)	25.4
Freight, stock, and material handlers	1,020	263	870	272	150	221	81.3	14.7
Garbage collectors	51	286	50	285	1	(1)	(1)	2.0
Stock handlers and baggers	363	214	288	218	75	199	91.3	20.7
Machine feeders and offbearers	86	266	57	282	30	(1)	(1)	34.9
Garage and service station related occupations	185	200	178	202	7	(1)	(1)	3.8
Vehicle washers and equipment cleaners	139	215	116	214	24	(1)	(1)	17.3
Hand packers and packagers	238	233	90	257	149	222	86.4	62.6
Laborers, except construction	921	283	772	291	149	232	79.7	16.2
Farming, forestry, and fishing occupations	1,318	217	1,178	220	140	187	85.0	10.6
Farm operators and managers	67	321	59	325	9	(1)	(1)	13.4
Farm managers	60	329	54	333	7	(1)	(1)	11.7
Other agricultural and related occupations	1,162	211	1,034	215	128	184	85.6	11.0
Farm occupations, except managerial	620	195	552	199	69	167	83.9	11.1
Farm workers	575	192	519	195	57	165	84.6	9.9
Related agricultural occupations	542	235	482	242	59	205	84.7	10.9
Supervisors, related agricultural occupations	94	345	87	360	7	(1)	(1)	7.4
Groundskeepers and gardeners, except farm	396	222	379	223	17	(1)	(1)	4.3
Forestry and logging occupations	65	286	62	290	3	(1)	(1)	4.6

[1] Data not shown where base is less than 50,000.

SOURCE: Monthly Labor Review, June 1987 - U. S. Dept. of Labor

TABLE 26

SUMMARY OF PENNSYLVANIA UC COVERED EMPLOYMENT
AVERAGE UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE
BY INDUSTRY, CALENDAR YEAR 1987

INDUSTRY	AVERAGE QUARTERLY UNITS	AVERAGE MONTHLY EMPLOYMENT	PERCENT CHANGE FROM 1986	TOTAL WAGES (THOUSANDS)	PERCENT CHANGE FROM 1986	AVERAGE ANNUAL WAGE	PERCENT CHANGE FROM 1986
TOTAL-ALL INDUSTRIES (Excluding Federal Government)	233,925	4,650,427	2.6	$94,082,048	8.0	$20,231	5.3
AGRICULTURE,FORESTRY,AND FISHING	3,813	34,197	3.4	460,838	10.7	13,476	7.0
01-AGRICULTURAL PRODUCTION-CROPS	470	11,466	-0.4	143,149	9.3	12,485	9.8
02-AGRICULTURAL PRODUCTION-LIVESTOCK	175	3,448	2.5	44,917	8.2	13,027	5.5
07-AGRICULTURAL SERVICES	3,099	18,918	5.9	267,918	11.6	14,162	5.3
08-FORESTRY	51	265	4.3	3,337	26.5	12,592	21.3
09-FISHING, HUNTING AND TRAPPING	18	101	8.6	1,517	20.0	15,024	10.5
MINING	1,232	30,839	-8.0	951,924	-3.3	30,868	5.1
10-METAL MINING	*	*		*		*	
11-ANTHRACITE MINING	*	*		*		*	
12-BITUMINOUS COAL & LIGNITE MINING	514	19,652	-9.5	656,685	-5.0	33,416	4.9
13-OIL & GAS EXTRACTION	417	4,085	-9.1	118,372	-1.9	28,977	7.9
14-NONMETALLIC MINERALS, EXCEPT FUELS	182	5,003	3.3	133,507	11.0	26,685	7.4
CONSTRUCTION	26,424	218,136	7.9	5,243,220	13.7	24,036	5.3
15-GENERAL BUILDING CONTRACTORS	9,328	61,139	10.1	1,330,377	18.0	21,760	7.2
16-HEAVY CONSTRUCTION CONTRACTORS	1,160	37,002	7.0	1,123,522	12.9	30,364	5.5
17-SPECIAL TRADE CONTRACTORS	15,936	119,995	7.1	2,789,320	12.1	23,245	4.6
MANUFACTURING	17,190	1,046,800	-0.3	26,154,169	3.4	24,985	3.7
20-FOOD & KINDRED PRODUCTS	1,264	90,911	0.9	2,006,125	5.2	22,067	4.3
21-TOBACCO MANUFACTURES	21	1,176	-34.0	20,699	-34.9	17,601	-1.4
22-TEXTILE MILL PRODUCTS	429	30,978	1.7	530,472	7.2	17,124	5.4
23-APPAREL & OTHER TEXTILE PRODUCTS	1,361	87,350	-6.1	1,075,565	-1.7	12,313	4.6
24-LUMBER & WOOD PRODUCTS	1,418	29,414	9.2	536,728	16.2	18,247	6.4
25-FURNITURE & FIXTURES	466	21,341	3.8	422,298	7.5	19,786	3.6
26-PAPER & ALLIED PRODUCTS	386	41,460	0.8	1,165,536	4.3	28,112	3.5
27-PRINTING & PUBLISHING	2,358	80,924	2.6	1,794,596	6.2	22,176	3.5
28-CHEMICALS & ALLIED PRODUCTS	567	58,873	0.7	2,034,940	4.4	34,565	3.7
29-PETROLEUM & COAL PRODUCTS	139	10,746	-0.5	424,790	-1.1	39,530	-0.5
30-RUBBER & MISC PLASTICS PRODUCTS	688	40,136	7.2	870,747	10.2	21,695	2.8
31-LEATHER & LEATHER PRODUCTS	112	10,222	-2.2	147,669	3.9	14,446	6.2
32-STONE, CLAY & GLASS PRODUCTS	793	47,435	0.4	1,265,747	3.6	26,684	3.2
33-PRIMARY METAL INDUSTRIES	561	87,683	-3.0	2,773,435	1.7	31,630	4.9
34-FABRICATED METAL PRODUCTS	1,813	91,836	0.8	2,284,530	3.5	24,876	2.7
35-MACHINERY, EXCEPT ELECTRICAL	2,657	103,653	-1.7	2,921,460	2.1	28,185	3.9
36-ELECTRIC & ELECTRONIC EQUIPMENT	833	95,526	-2.8	2,504,310	0.1	26,216	3.0
37-TRANSPORTATION EQUIPMENT	338	62,137	1.9	1,961,350	3.8	31,565	1.9
38-INSTRUMENTS & RELATED PRODUCTS	485	34,362	-3.7	929,805	-0.4	27,059	3.5

* DATA WHICH MIGHT BE IDENTIFIED WITH AN INDIVIDUAL EMPLOYER AND/OR DATA INVOLVING FEWER THAN TWENTY-FIVE EMPLOYES ARE NOT PUBLISHED.

NOTE - UNITS, EMPLOYMENT AND WAGES MAY NOT ADD DUE TO ROUNDING.

TABLE 26 (cont.)

SUMMARY OF PENNSYLVANIA UC COVERED EMPLOYMENT
AVERAGE UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE
BY INDUSTRY, CALENDAR YEAR 1987

INDUSTRY	AVERAGE QUARTERLY UNITS	AVERAGE MONTHLY EMPLOYMENT	PERCENT CHANGE FROM 1986	TOTAL WAGES (THOUSANDS)	PERCENT CHANGE FROM 1986	AVERAGE ANNUAL WAGE	PERCENT CHANGE FROM 1986
39-MISC MANUFACTURING INDUSTRIES	500	20,639	-0.7	483,370	6.2	23,420	7.0
TRANSPORTATION, AND PUBLIC UTILITIES	8,884	226,501	3.7	6,163,369	6.5	27,211	2.7
40-RAILROAD TRANSPORTATION	*	*		*		*	
41-LOCAL & INTERURBAN PASSENGER TRANSIT	1,281	21,982	2.1	223,204	7.4	10,154	5.2
42-TRUCKING & WAREHOUSING	4,547	69,437	4.6	1,614,018	8.0	23,244	3.2
44-WATER TRANSPORTATION	130	4,682	3.4	170,604	2.9	36,438	-0.4
45-TRANSPORTATION BY AIR	239	14,779	12.4	416,970	10.1	28,214	-2.1
46-PIPE LINES, EXCEPT NATURAL GAS	*	*		*		*	
47-TRANSPORTATION SERVICES	1,226	10,673	0.9	200,706	6.3	18,805	5.3
48-COMMUNICATION	811	49,473	3.1	1,525,276	4.8	30,830	1.6
49-ELECTRIC, GAS, & SANITARY SVCS	627	54,760	2.0	1,984,579	6.0	36,241	3.9
WHOLESALE TRADE	21,051	263,981	1.6	6,664,658	8.4	25,247	6.7
50-WHOLESALE TRADE-DURABLE GOODS	14,181	164,531	1.2	4,349,430	8.2	26,435	6.9
51-WHOLESALE TRADE-NONDURABLE GOODS	6,871	99,450	2.4	2,315,229	8.9	23,280	6.4
RETAIL TRADE	55,185	857,874	2.8	9,196,083	7.1	10,720	4.2
52-BUILDING MATERIALS & GARDEN SUPPLIES	2,791	30,548	6.8	477,538	13.9	15,632	6.7
53-GENERAL MERCHANDISE STORES	1,181	125,844	-0.2	1,392,136	1.8	11,062	2.0
54-FOOD STORES	6,383	152,238	4.0	1,550,573	6.2	10,185	2.1
55-AUTOMOTIVE DEALERS & SERVICE STATIONS	7,638	91,083	2.5	1,602,007	6.5	17,588	3.9
56-APPAREL & ACCESSORY STORES	4,464	50,565	5.0	494,930	8.3	9,788	3.2
57-FURNITURE & HOME FURNISHINGS STORES	4,038	34,277	4.6	531,340	16.4	15,501	11.2
58-EATING & DRINKING PLACES	16,845	259,176	2.7	1,746,697	7.4	6,739	4.6
59-MISC RETAIL	11,847	114,143	2.8	1,400,863	8.2	12,273	5.2
FINANCE, INSURANCE, AND REAL ESTATE	15,945	291,195	5.4	6,909,650	12.1	23,729	6.4
60-BANKING	666	89,939	3.6	1,840,245	6.8	20,461	3.1
61-CREDIT AGENCIES OTHER THAN BANKS	1,919	30,891	7.9	624,538	15.7	20,217	7.2
62-SECURITY, COMMODITY BROKERS & SVCS	870	14,032	12.1	739,515	16.6	52,702	4.0
63-INSURANCE CARRIERS	1,296	83,621	5.7	2,074,900	12.2	24,813	6.1
64-INSURANCE AGENTS, BROKERS & SVC	4,425	24,683	4.5	620,173	15.1	25,126	10.2
65-REAL ESTATE	6,121	38,708	4.0	706,985	13.0	18,265	8.6
66-COMBINED REAL ESTATE, INSURANCE, ETC	132	514	-2.1	9,149	6.7	17,800	8.9
67-HOLDING & OTHER INVESTMENT OFFICES	517	8,809	12.4	294,146	22.0	33,392	8.5
SERVICES	78,435	1,164,267	4.8	21,509,721	13.2	18,475	8.0
70-HOTELS & OTHER LODGING PLACES	1,754	52,842	1.7	513,906	8.1	9,725	6.3
72-PERSONAL SERVICES	8,257	51,372	2.7	533,002	8.5	10,375	5.7
73-BUSINESS SERVICES	12,554	217,874	8.8	3,812,877	14.8	17,500	5.5
75-AUTO REPAIR, SERVICES & GARAGES	6,787	35,968	4.3	564,605	11.5	15,697	6.9
76-MISC REPAIR SERVICES	2,494	13,966	0.3	288,899	7.2	20,686	6.9

* DATA WHICH MIGHT BE IDENTIFIED WITH AN INDIVIDUAL EMPLOYER AND/OR DATA INVOLVING FEWER THAN TWENTY-FIVE EMPLOYES ARE NOT PUBLISHED.

NOTE - UNITS, EMPLOYMENT AND WAGES MAY NOT ADD DUE TO ROUNDING.

TABLE 26 (cont.)
SUMMARY OF PENNSYLVANIA UC COVERED EMPLOYMENT
AVERAGE UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE
BY INDUSTRY, CALENDAR YEAR 1987

INDUSTRY	AVERAGE QUARTERLY UNITS	AVERAGE MONTHLY EMPLOYMENT	PERCENT CHANGE FROM 1986	TOTAL WAGES (THOUSANDS)	PERCENT CHANGE FROM 1986	AVERAGE ANNUAL WAGE	PERCENT CHANGE FROM 1986
78-MOTION PICTURES	390	5,542	4.3	63,114	7.3	11,388	2.9
79-AMUSEMENT & RECREATION SERVICES	2,878	40,336	3.9	460,935	7.9	11,427	3.8
80-HEALTH SERVICES	18,943	417,056	4.3	9,000,131	14.4	21,580	9.7
81-LEGAL SERVICES	5,011	35,930	6.3	1,085,487	21.6	30,211	14.4
82-EDUCATIONAL SERVICES	1,726	101,397	1.9	1,983,041	8.9	19,557	6.9
83-SOCIAL SERVICES	3,481	81,010	7.6	944,092	13.8	11,654	5.8
84-MUSEUMS, BOTANICAL, ZOOLOGICAL GRDNS	63	2,110	12.5	30,848	9.0	14,620	-3.1
86-MEMBERSHIP ORGANIZATIONS	6,030	43,723	0.1	460,243	5.6	10,526	5.4
88-PRIVATE HOUSEHOLDS	3,083	5,299	-0.8	43,807	8.4	8,267	9.3
89-MISC SERVICES	4,986	59,843	6.7	1,724,734	12.5	28,821	5.4
LOCAL GOVERNMENT	4,299	385,429	0.9	7,842,041	8.2	20,346	7.2
STATE GOVERNMENT	1,468	131,210	-0.2	2,986,376	4.7	22,760	4.9
FEDERAL GOVERNMENT (EXCLUDED FROM TOTAL)	2,370	141,081	1.7	3,718,298	5.6	26,356	3.9
* TOTAL - UNPUBLISHED 2-DIGIT INDUSTRIES	144	2,812		71,372			

THE PERCENT CHANGE FROM PRIOR YEAR IN EMPLOYMENT AND WAGES MAY BE DUE TO REFINEMENTS IN DETERMINING THE INDUSTRIAL ACTIVITY OF EXISTING EMPLOYERS RATHER THAN TO ECONOMIC SHIFTS. LISTED BELOW ARE SIC CODES FOLLOWED BY THE NUMBER OF EMPLOYES WHICH WERE AFFECTED BY CODING REFINEMENTS.

STATE GOVERNMENT - TOTAL 6

LOCAL GOVERNMENT - TOTAL -1

PRIVATE SECTOR - TOTAL -5

01	-3	02	64	07	-112	08	1	11	8	12	-6	13	3
14	-56	15	33	16	219	17	458	20	282	22	105	23	11
24	-316	25	306	26	67	27	-49	28	324	29	-36	30	923
32	-250	33	-273	34	625	35	161	36	-197	37	725	38	-264
39	-556	41	158	42	159	44	1	45	26	47	59	48	187
49	238	50	-1878	51	-737	52	-90	53	197	54	-362	55	16
56	275	57	-263	58	450	59	-2122	60	12	61	77	62	-16
63	292	64	13	65	-100	66	-4	67	267	70	203	72	136
73	1719	75	222	76	-462	78	-12	79	125	80	-394	81	-5
82	149	83	459	84	-1	86	-6	88	-5	89	-1199	91	14

* DATA WHICH MIGHT BE IDENTIFIED WITH AN INDIVIDUAL EMPLOYER AND/OR DATA INVOLVING FEWER THAN TWENTY-FIVE EMPLOYES ARE NOT PUBLISHED.

NOTE - UNITS, EMPLOYMENT AND WAGES MAY NOT ADD DUE TO ROUNDING.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 27
PENNSYLVANIA
RANK 1/ AND EARNINGS GROWTH IN SELECTED INDUSTRIES
1977 AND 1987 ANNUAL AVERAGES

RANK	INDUSTRY	1987 AWE*	1977 AWE*	DOLLAR INCREASE	PERCENT INCREASE
1	ELECTRIC, GAS AND SANITARY SERVICE	$645.64	$334.74	$310.90	92.9%
2	BITUMINOUS COAL MINING	638.84	350.28	288.56	82.4
3	PETROLEUM AND COAL PRODUCTS	577.58	314.36	263.22	83.7
4	PRIMARY METALS	535.06	308.07	226.99	73.7
5	COMMUNICATIONS	531.47	279.79	251.68	90.0
6	CHEMICAL PRODUCTS	507.72	256.88	250.84	97.6
7	TRANSPORTATION EQUIPMENT	489.19	289.26	199.93	69.1
8	PAPER PRODUCTS	469.04	239.36	229.68	96.0
9	MACHINERY, EXCEPT ELECTRICAL	460.89	262.92	197.97	75.3
	TOTAL DURABLE GOODS	447.91	260.48	187.43	72.0
10	FABRICATED METAL PRODUCTS	440.37	246.64	193.73	78.5
11	STONE, CLAY AND GLASS PRODUCTS	438.84	237.92	200.92	84.4
12	PRINTING AND PUBLISHING	430.12	238.52	191.60	80.3
13	INSTRUMENTS AND RELATED PRODUCTS	422.66	226.43	196.23	86.7
14	MISCELLANEOUS MANUFACTURING	411.87	218.09	193.78	88.9
15	ELECTRIC AND ELECTRONIC EQUIPMENT	410.23	225.74	184.49	81.7
	ALL MANUFACTURING INDUSTRIES	408.18	231.08	177.10	76.6
16	ANTHRACITE COAL MINING	407.16	297.73	109.43	36.8
17	FOOD AND KINDRED PRODUCTS	395.11	219.89	175.22	79.7
18	RUBBER AND MISCELLANEOUS PRODUCTS	378.59	209.10	169.49	81.1
	TOTAL NONDURABLE GOODS	358.89	188.62	170.27	90.3
19	FURNITURE AND FIXTURES	353.68	187.40	166.28	88.7
20	LUMBER AND WOOD PRODUCTS	353.64	178.70	174.94	97.9
21	TEXTILE PRODUCTS	275.10	154.37	120.73	78.2
22	TOBACCO PRODUCTS	254.81	131.71	123.10	93.5
23	LEATHER PRODUCTS	225.82	134.98	90.84	67.3
24	APPAREL AND RELATED PRODUCTS	211.09	125.95	85.14	67.6
25	GENERAL MERCHANDISE STORES	182.21	112.42	69.79	62.1

* - AWE = Average Weekly Earnings
1/ - Rank on basis of 1987 Average Weekly Earnings

SOURCE: Bureau of Research and Statistics, Pennsylvania Dept. of Labor and Industry

TABLE 28
PENNSYLVANIA
ACTUAL AND ADJUSTED GROSS EARNINGS
OF MANUFACTURING PRODUCTION WORKERS

Annual Average 1967 thru 1987
Monthly 1988 to Date

Year/Month	U.S. Consumer Price Index	Actual Weekly Earnings	Adjusted Weekly Earnings	Difference Due to Inflation
1967	33.4	$112.52	$336.89	$224.37
1968	34.8	119.20	342.53	223.33
1969	36.7	127.52	347.47	219.95
1970	38.8	131.71	339.46	207.75
1971	40.5	140.73	347.48	206.75
1972	41.8	154.42	369.43	215.01
1973	44.4	167.23	376.64	209.41
1974	49.3	180.97	367.08	186.11
1975	53.8	193.22	359.14	165.92
1976	56.9	210.11	369.26	159.15
1977	60.6	231.08	381.32	150.24
1978	65.2	254.80	390.80	136.00
1979	72.6	278.10	383.06	104.96
1980	82.4	294.49	357.39	62.90
1981	90.9	325.36	357.93	32.57
1982	96.5	331.39	343.41	12.02
1983	99.6	350.84	352.25	1.41
1984	103.9	373.06	359.06	-14.00
1985	107.6	381.84	354.87	-26.97
1986	109.6	391.55	357.25	-34.30
1987	113.6	408.18	359.31	-48.87
1988 Jan.	115.7	$415.95	$359.51	-$56.44
Feb.	116.0	414.12	357.00	-57.12
Mar.	116.5	413.71	355.12	-58.59
Apr.	117.1	417.18	356.26	-60.92
May	117.5	416.16	354.18	-61.98
June	118.0	421.48	357.19	-64.29

NOTE: Data adjusted to 1982-1984 dollars.

Source: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

GRAPH 3
PENNSYLVANIA
ACTUAL AND ADJUSTED GROSS EARNINGS
OF MANUFACTURING PRODUCTION WORKERS

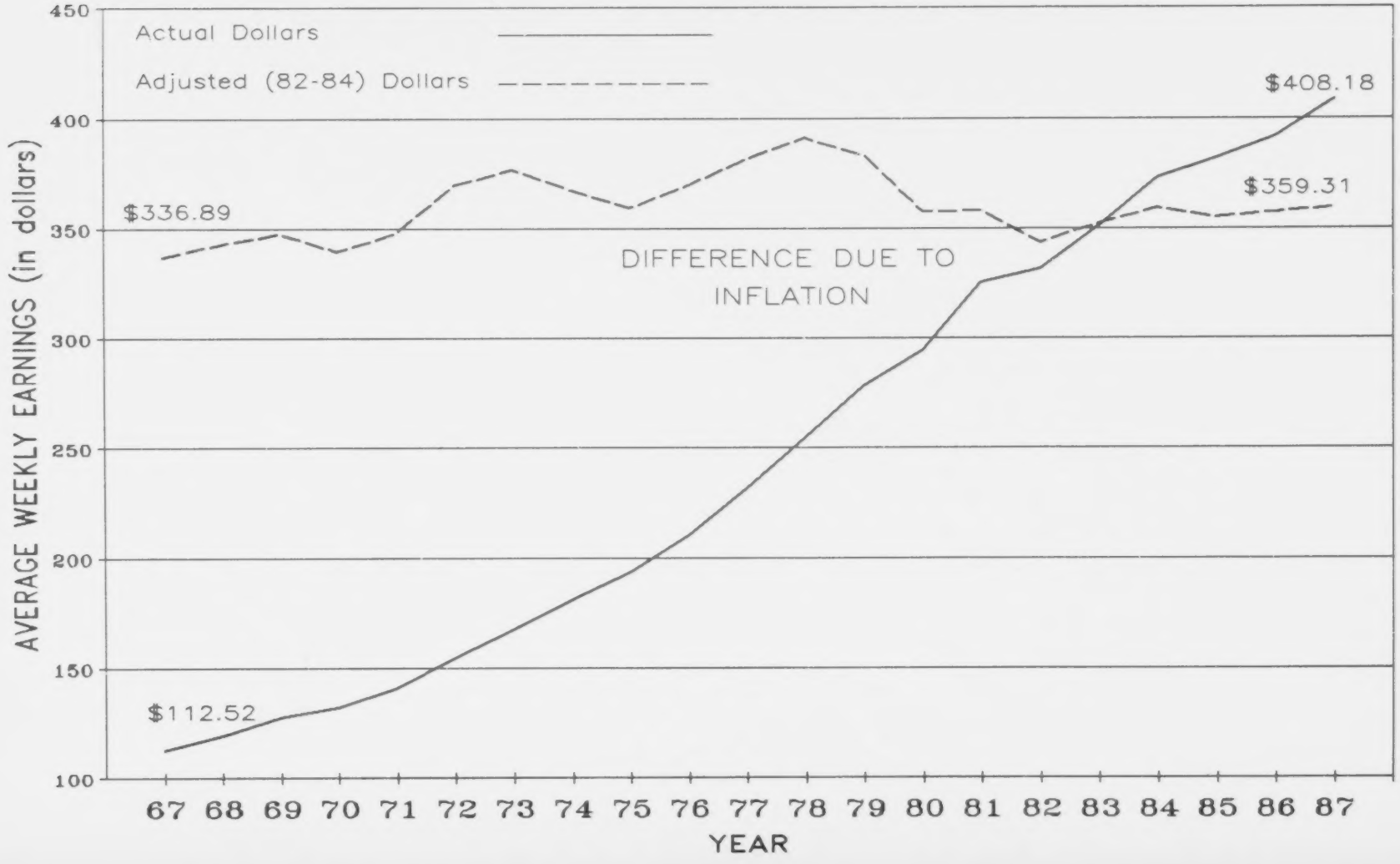


TABLE 29

AVERAGE EARNINGS AND HOURS OF MANUFACTURING
PRODUCTION WORKERS IN MAJOR PENNSYLVANIA LABOR MARKET AREAS

AVERAGE WEEKLY EARNINGS

MAJOR LABOR MARKET AREA	SECOND QUARTER 1987	THIRD QUARTER 1987	FOURTH QUARTER 1987	FIRST QUARTER 1988	SECOND QUARTER 1988
PENNSYLVANIA	404.15	408.59	420.21	414.12	418.61
Allentown-Bethlehem MSA	411.47	420.80	423.80	405.43	413.03
Altoona MSA	343.94	338.98	334.77	345.20	352.35
Beaver County PMSA	462.16	454.69	462.31	457.95	450.47
Erie MSA	421.87	432.60	442.80	443.59	440.96
Harrisburg-Lebanon-Carlisle MSA	370.00	374.26	378.54	377.30	375.80
Johnstown MSA	325.98	324.97	342.80	341.15	329.83
Lancaster MSA	386.40	387.37	402.62	396.59	399.60
Philadelphia MSA	437.93	442.66	451.54	444.11	452.88
Pittsburgh PMSA	464.54	467.41	482.23	474.05	472.08
Reading MSA	407.84	417.36	441.42	434.02	435.99
Scranton--Wilkes-Barre MSA	335.53	345.25	345.54	338.69	344.04
Sharon MSA	467.17	477.00	489.49	486.20	474.01
State College MSA	319.12	318.20	326.49	321.70	325.70
Williamsport MSA	354.45	347.33	361.64	358.44	364.32
York MSA	398.47	403.42	413.52	411.20	417.05

AVERAGE WEEKLY HOURS

MAJOR LABOR MARKET AREA	SECOND QUARTER 1987	THIRD QUARTER 1987	FOURTH QUARTER 1987	FIRST QUARTER 1988	SECOND QUARTER 1988
PENNSYLVANIA	40.7	40.9	41.4	40.8	41.0
Allentown-Bethlehem MSA	39.3	40.0	40.4	39.4	40.1
Altoona MSA	39.9	39.6	39.2	40.0	40.5
Beaver County PMSA	41.9	41.0	41.8	42.6	42.1
Erie MSA	41.4	42.0	42.7	42.9	42.4
Harrisburg-Lebanon-Carlisle MSA	39.7	39.9	40.1	39.8	39.6
Johnstown MSA	38.9	39.2	40.0	39.9	39.5
Lancaster MSA	40.0	40.1	41.0	40.1	40.0
Philadelphia MSA	40.7	40.5	40.9	40.3	40.4
Pittsburgh PMSA	41.7	41.4	42.6	42.1	42.0
Reading MSA	40.5	41.2	42.0	41.1	40.9
Scranton--Wilkes-Barre MSA	38.7	39.1	39.0	38.4	38.7
Sharon MSA	41.6	42.4	42.9	42.5	41.8
State College MSA	39.3	38.9	39.1	38.9	39.1
Williamsport MSA	41.7	41.3	42.1	41.2	41.4
York MSA	42.3	42.6	43.3	42.7	42.6

AVERAGE HOURLY EARNINGS

MAJOR LABOR MARKET AREA	SECOND QUARTER 1987	THIRD QUARTER 1987	FOURTH QUARTER 1987	FIRST QUARTER 1988	SECOND QUARTER 1988
PENNSYLVANIA	9.93	9.99	10.15	10.15	10.21
Allentown-Bethlehem MSA	10.47	10.52	10.49	10.29	10.30
Altoona MSA	8.62	8.56	8.54	8.63	8.70
Beaver County PMSA	11.03	11.09	11.06	10.75	10.70
Erie MSA	10.19	10.30	10.37	10.34	10.40
Harrisburg-Lebanon-Carlisle MSA	9.32	9.38	9.44	9.48	9.49
Johnstown MSA	8.38	8.29	8.57	8.55	8.35
Lancaster MSA	9.66	9.66	9.82	9.89	9.99
Philadelphia MSA	10.76	10.93	11.04	11.02	11.21
Pittsburgh PMSA	11.14	11.29	11.32	11.26	11.24
Reading MSA	10.07	10.13	10.51	10.56	10.66
Scranton--Wilkes-Barre MSA	8.67	8.83	8.86	8.82	8.89
Sharon MSA	11.23	11.25	11.41	11.44	11.34
State College MSA	8.12	8.18	8.35	8.27	8.33
Williamsport MSA	8.50	8.41	8.59	8.70	8.80
York MSA	9.42	9.47	9.55	9.63	9.79

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

IV. OCCUPATIONAL TRENDS AND OUTLOOK: 1984-1995

Changes anticipated in Pennsylvania's occupational structure over the 1984 to 1995 period are graphically depicted in the pie chart on page 79. For greater occupational detail, the reader is referred to Table 35 at the end of Section IV.

Many of the past trends in the occupational composition of total employment are expected to continue through 1995. Employment continues to expand more rapidly in the service and white collar occupations as the number of blue collar jobs decline. One departure from past trends is the expected slowdown in the rate of growth for many occupations in the clerical group. The automation of clerical tasks will slow the growth of many detailed occupations and cause some to decline. As a result, the share of total employment accounted for by the administrative support group is projected to decline from 17.2 percent in 1984 to 16.8 percent in 1995.

Labor force separations (deaths, retirements, or withdrawals from the labor force for other reasons) will create the majority of the total projected job openings. About 84 percent of the 250,400 projected annual average job openings will result from labor force separations. Therefore, a large volume occupation with little or no growth can generate more total job openings than a relatively small volume occupation with rapid growth. For instance, the high volume-no growth occupation of packaging and filling machine operator has more annual average job openings than the lower volume-high growth occupation of paralegal personnel.

Over the 1984-95 period, the two major occupational groups having the largest proportion of workers normally requiring a college education or specialized post-secondary training are expected to increase faster than the average for all occupations. The first of these groups, managerial and management related occupations, is projected to increase by 58,800 jobs or 12.8 percent. The demand for salaried managers is expected to increase as firms increasingly depend on trained management specialists. Professional, technical and related occupations are projected to increase by 135,700 jobs or 16.7 percent. Computer related occupations and certain health specialty occupations are expected to surge. By 1995, employment in the major group is expected to comprise 17.1 percent of total state employment, an increase from the 16.0 percent share in 1984.

The number of marketing and sales occupations is projected to increase by 17.1 percent, or about twice as fast as the increase for all occupations, from 1984 to 1995. About 39,400 openings are projected annually for this major group. Retail salespersons and cashiers account for 46.0 percent of the occupations in the group.

Administrative support and clerical workers is the largest of the major occupational groups. Every major industry sector employs large numbers of clerical workers. Through the 1984-95 period this group is projected to increase by 5.8 percent, a rate lower than the average for all occupations. In spite of the slowing growth rate, 35,400 annual average job openings are projected for this group through 1995. Significant numbers of new jobs are expected to be added in several clerical fields, including secretaries (12,200 jobs); general office clerks (9,500 jobs); receptionists and information clerks (4,200 jobs); and tellers (3,600 jobs).

Service occupations are projected to grow at a significantly higher rate (20.3 percent) than the average for all jobs (8.7 percent) through 1995. This group is expected to account for more job growth than any other group (up 158,200) and increase its share of total employment from 15.3 to 16.9 percent by 1995. Food service workers account for 41 percent of all service occupations and are expected to add 74,900 new jobs during the 1984-95 period. Among the occupations projected to add large numbers of new jobs are waiters and waitresses (23,100); food preparation workers (10,200); and restaurant cooks (6,900). Cleaning and building service workers are comprised almost entirely of janitors and cleaners and are projected to increase by 15.8 percent from 1984-1995. Health service occupations are projected to increase by 29.7 percent during the projection period, with the high volume and growth occupation, nursing aides and orderlies, accounting for 67.0 percent of the job growth. Personal service occupations are projected to add 16,200 new jobs, or 21.7 percent during the projection period. Occupations growing at a faster rate include cosmetologists and related workers, social welfare service aides, and flight attendants. The number of protective service occupations is projected to grow by 13.7 percent. Guards are expected to increase considerably faster (24.3 percent) and account for 71.0 percent of the new jobs in protective services.

Precision production, craft and repair occupations are projected to increase by 2.0 percent from 1984 to 1995, which is considerably slower than the average for all occupations. Employment in this group is closely related to the construction and manufacturing industries in which they are concentrated; construction is projected to have average growth and manufacturing employment is projected to decline. Carpenters are, by far, the largest of the construction trades and are projected to grow by 16.8 percent between 1984 and 1995. Mechanics, installers and repairers are projected to increase by 7.5 percent and add 17,200 new jobs by 1995. Due to the projected decline in manufacturing employment, precision production jobs are expected to decline by 8.2 percent during the 1984-95 period. Despite the decline, 4,900 annual average job openings are projected for this group.

Operators, fabricators and laborers are projected to decline by 7.2 percent from 1984 to 1995. Many occupations in this group, including machine operators and assemblers are expected to be affected by new technologies, such as computer-aided manufacturing and robotics. Technological change is expected to have less of an impact on transportation occupations, such as truck drivers, bus drivers, and airplane pilots. Truck drivers are projected to increase by 10,800 jobs, or 9.4 percent from 1984 to 1995 and remain the largest occupation in the operators group.

Agriculture, forestry and fishing workers are expected to continue to decline because of productivity growth in agriculture. However, the decline is not expected to be as great as in the recent past.

Table 30 presents Pennsylvania's top 27 occupations based on projected annual average job openings during the 1984-1995 period, not to be confused with Pennsylvania's fastest growing occupations, which include many of those associated with advanced technology. The occupations observed in Table 30 are the large volume jobs, those that, in most cases, are found in all industries and, therefore, traditionally provide many of the State's job opportunities.

Table 34 is a listing of the 100 occupations with the greatest degree of potential employability in Pennsylvania during the period 1984-1995, based on projected employment in the occupation, volume and rate of projected job growth, and the annual average number of job openings produced in the field by either turnover or job creation. These 100 occupations account for two-thirds of total projected employment and nearly three-fourths of all annual average job openings during the ten-year period. The occupations are ranked in terms of their employment probability, i.e., their ability to generate hiring potential during the 1980s. On this basis, registered nurse is the occupation offering the greatest potential followed by cashier, nursing aide/orderly/attendant, waiter and waitress, computer programmer, guard, hairdresser/stylist/cosmetologist, restaurant cook, accountant and auditor, and food preparation worker. It is obvious that most of these jobs will be in such nonmanufacturing industries as health services, retail trade, eating and drinking places, and business services. This is not surprising in view of the growth trend among industries in recent years or the high turnover in such occupations as cashier, fast food worker, waiter/waitress, or security guard. This occupational listing is undoubtedly similar to those of most areas of the United States. It does not mean that high-paying jobs with advancement potential will be in short supply. Occupational growth is closely related to the demands of society, and our society needs nurses and cashiers in greater numbers than it needs chemists or lawyers. The full list of 100 occupations contains many highly-paid professional and skilled crafts areas, such as civil engineer, computer programmer, electrician, physician/surgeon, systems analyst, teacher, and operating engineer. Nevertheless, the bulk of the jobs that will be generated will be in the clerical, sales, and service categories.

TABLE 30

Occupations With Most Openings in Pennsylvania: 1984-1995
(Annual Average Job Openings)

Occupations	Annual Average Openings	Due to Growth	Due to Labor Force Separations 1/
1. Janitors & Cleaners, Inc. Maids	13,122	1,930	11,192
2. Salespersons, Retail	11,661	1,766	9,895
3. General Office Clerks	5,741	863	4,878
4. Secretaries	5,729	1,106	4,623
5. Registered Nurses	5,268	2,610	2,658
6. Cashiers	5,007	2,276	2,731
7. Guards	4,843	866	3,977
8. Stock Clerks, Sales Floor	4,821	924	3,897
9. Truck Drivers	4,499	983	3,516
10. Waiters & Waitresses	4,427	2,096	2,331
11. Bookkeeping Acctg., & Aud. Clerks	4,422	236	4,186
12. Nursing Aides & Orderlies	3,485	1,451	2,034
13. Food Preparation Workers	3,002	927	2,075
14. Blue Collar Worker Supervisors	2,599	-669	3,268
15. Maint. Repairers, Genl. Util.	2,426	472	1,954
16. Accountants & Auditors	2,373	849	1,524
17. Physicians & Surgeons	2,263	453	1,810
18. College & University Fac.	2,212	443	1,769
18. Cleaners & Serv., Pvt. Household	2,212	-73	2,285
20. Teachers, Preschool & Elementary	2,140	649	1,491
21. Carpenters	2,082	630	1,452
22. Farmers	2,038	-300	2,338
23. Bartenders	2,025	514	1,511
24. Teachers, Secondary School	1,924	494	1,430
25. Gardeners & Groundskeepers	1,898	398	1,500
26. Hairdressers, Hairstylists, Cosmetologists	1,878	733	1,145
27. Lawyers	1,849	415	1,434

The 27 listed occupations comprise 42.3 percent of the total annual job openings.

1/ Due to deaths, retirements, and other separations from the labor force. Does not include transfers out of occupations.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 31

Fastest Growing Occupations in Pennsylvania: 1984-1995 1/

Occupations	Estimated 1984 Employment	Projected 1995 Employment	Percent Increase
1. Paralegal Personnel	3,326	5,604	68.5
2. Medical Assistants	5,166	8,271	60.1
3. Computer Programmers	21,214	33,237	56.7
4. Data Processing Equip. Reprs.	3,128	4,751	51.9
5. Computer Systems Analysts, EDP	15,693	22,468	43.2
6. Physician Assistants	1,899	2,708	42.6
7. Physical Therapists	2,741	3,845	40.3
8. Social Welfare Service Aides	9,421	13,153	39.6
9. Peripheral EDP Equip. Ops.	2,402	3,289	36.9
10. Dental Hygienists	3,246	4,433	36.6
11. Securities & Fin. Servs. Sales	11,598	15,828	36.5
12. Medical Records Techn. & Tech.	1,761	2,394	35.9
12. Dental Assistants	7,350	9,985	35.9
14. Detect. & Invest., exc. public	2,025	2,706	33.6
14. Housekeepers, Institutional	3,356	4,483	33.6
14. Registered Nurses	85,553	114,267	33.6
17. Brokerage Clerks	1,709	2,280	33.4
18. Empl. Interviewers, Emp. Sec.	1,907	2,513	31.8
19. Dental Lab Techns., Prec.	1,911	2,501	30.9
20. Cooks, Restaurant	22,557	29,431	30.5
21. Hairdressers, Hairstylists, Cosmetologists	26,912	34,976	30.0
22. Hosts & Hostesses, Rest./Lounge	7,510	9,755	29.9
23. Nursing Aides & Orderlies	53,655	69,611	29.7
24. Air Craft Pilots & Flight Engineers	1,561	2,019	29.3
25. Opticians, Dispensing & Measuring	1,954	2,524	29.2
25. Travel Agents	3,445	4,452	29.2
27. Dentists	6,902	8,909	29.1

1/ Includes only those occupations with estimated 1984 employment of at least 1,500 and percent increase greater than 29.0 percent.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 32

Most Rapidly Declining Occupations in Pennsylvania: 1984-1995 1/

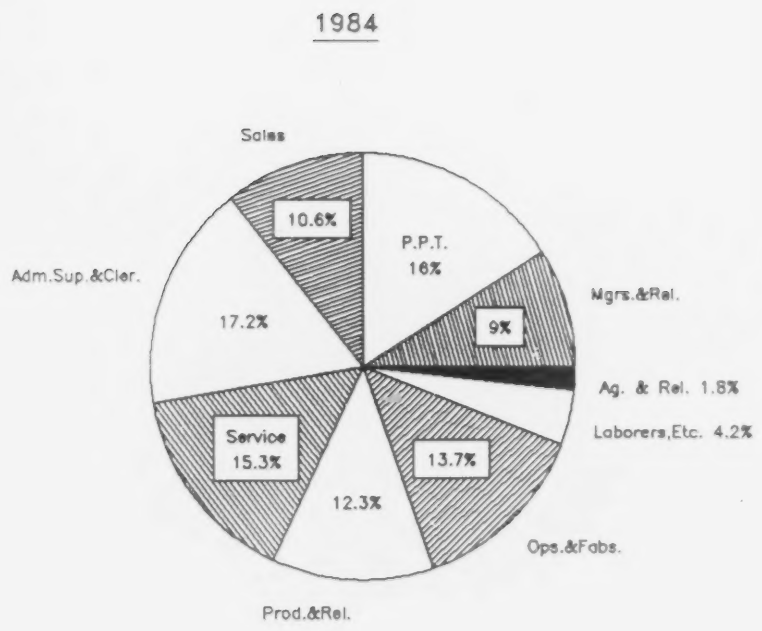
Occupations	Estimated 1984 Employment	Projected 1995 Employment	Percent Decline
1. Rolling Mach. Set & Set-up Ops.	1,882	1,029	45.3
2. Station Installers & Repairers	2,609	1,556	40.4
3. Stenographers	11,392	6,878	39.6
4. Ext. & Draw. Mach. Setters & Set-up Ops.	1,883	1,147	39.1
5. Furnace, Kiln, or Kettle Ops.	1,759	1,081	38.5
6. Shoe Sewing Mach. Ops. & Tenders	3,131	1,935	38.2
7. Shear Mach., Setters & Set-up Ops.	1,675	1,093	34.7
8. RR Brake, Signal & Switch Ops.	2,318	1,540	33.6
9. Lathe Mach. Tool Setters & Set-up Ops.	7,202	4,838	32.8
10. Drill Mach. Tool Setters & Set-up Ops.	4,870	3,279	32.7
11. Portable Machine Cutters	1,584	1,058	32.4
12. Grinding Mach. Setters & Set-up Ops.	5,922	4,053	31.6
13. Milling Mach. Setters & Set-up Ops.	2,446	1,684	31.2
14. Machine Forging Ops. & Tenders	11,683	8,066	31.0
15. Mach. Tool Cutting Ops. & Tenders	8,828	5,980	30.7
16. Furnace Operators & Tenders	2,011	1,411	29.8
17. Sewing Mach. Ops., Garment	67,730	47,733	29.5
18. Rail-Track Laying & Maint. Equip. Ops.	2,399	1,698	29.2
19. RR Conductors & Yardmasters	2,434	1,752	28.0
20. Punch Mach. Setters & Set-up Ops.	3,986	2,884	27.6
21. Press Mach. Setters & Set-up Ops.	3,920	2,855	27.2
22. Pressers, Hand	2,487	1,829	26.5
23. Hoist, Winch & Crane Ops.	7,725	5,697	26.3
23. Foundry Mold & Core Makers	2,554	1,883	26.3
25. Cutters & Trimmers, Hand	5,262	3,897	25.9
26. Textile Mach. Ops. & Tenders	8,800	6,548	25.6

1/ Includes only those occupations with estimated 1984 employment of at least 1,500 and percent decline greater than 25.0 percent.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

GRAPH 4

PENNSYLVANIA
PERCENT DISTRIBUTION OF TOTAL EMPLOYMENT
BY MAJOR OCCUPATIONAL GROUP



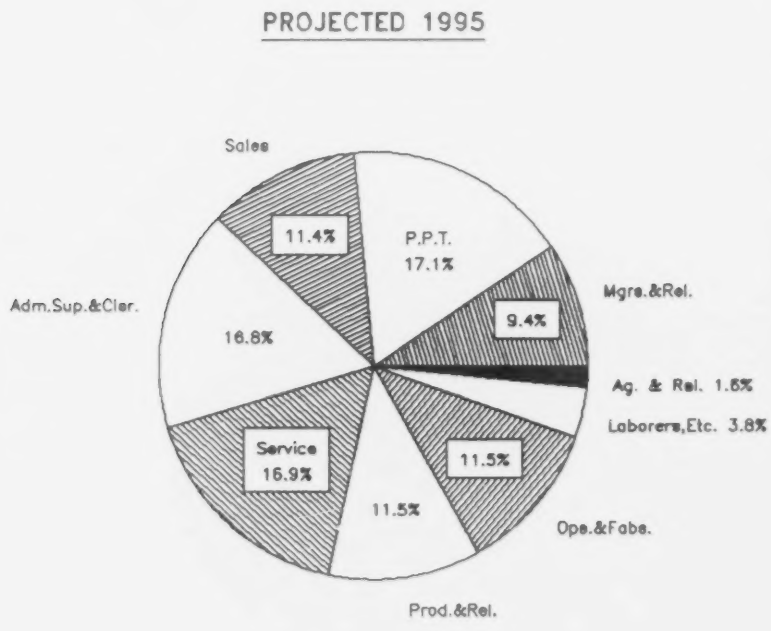


TABLE 33

OCCUPATIONAL EMPLOYMENT PROBABILITY ASSESSMENT REPORT

RELATIVE RANKING AND GRADE

OF

TOP 25 OCCUPATIONS

The following list of 25 occupations have a higher degree of potential employability based on a combination of the following factors: Projected Employment (1995); Volume of Growth in number of new jobs; Rate of Employment Growth; and number of Annual Average Job Openings.

OCCUPATION	SOC CODE 1/	ESTIMATED 1984 EMP.	PROJECTED 1995 EMP.	VOLUME OF GROWTH	RATE OF GROWTH	ANN. AVG. JOB OPENINGS	RANK 2/
Registered Nurses	2900	85,553	114,267	28,714	33.6	5,268	1
Cashiers	4364	87,894	112,928	25,034	28.5	5,007	2
Nursing Aides, Orderlies/Attendants	5236	53,655	69,611	15,956	29.7	3,485	3
Waiters and Waitresses	5213	84,006	107,057	23,051	27.4	4,427	4
Computer Programmers	3971	21,214	33,237	12,023	56.7	1,248	5
Guards	5144	39,235	48,762	9,527	24.3	4,843	6
Hairdresser/Stylist/Cosmetologist	5253	26,912	34,976	8,064	30.0	1,878	7
Cooks, Restaurant	5214	22,557	29,431	6,874	30.5	1,790	8
Accountants and Auditors	1412	41,105	50,445	9,340	22.7	2,373	9
Food Preparation Workers	5217	47,296	57,488	10,192	21.5	3,002	10
Computer Systems Analysts, EDP	1712	15,693	22,468	6,775	43.2	835	11
Janitor and Cleaner, Industrial Maint	5244	133,241	154,476	21,235	15.9	13,122	12
Bartenders	5212	23,678	29,333	5,655	23.9	2,025	12
Auto & Motorcycle Mechanics	6111	33,631	40,959	7,328	21.8	1,680	14
All Other Sales & Related Workers	4400	173,215	197,527	24,312	14.0	13,425	15
All Other Service Workers	5200	42,639	50,207	7,568	17.7	4,834	15
Securities & Finance Svcs Sales Workers	4124	11,598	15,828	4,230	36.5	1,098	17
All Other Managers & Administrators	VAR.	284,218	321,578	37,360	13.1	17,329	18
Stock Clerk, Sales Floor	4362	61,876	72,043	10,167	16.4	4,821	18
All Other Food Service Workers	5210	32,058	38,736	6,678	20.8	1,906	20
Food Prep & Service Worker, Fast Food	5216	34,227	40,924	6,697	19.6	1,684	21
Physicians & Surgeons	2610	23,776	28,760	4,984	21.0	2,263	21
Social Welfare Service Aides	2032	9,421	13,153	3,732	39.6	919	23
Carpenters	6422	41,225	48,154	6,929	16.8	2,082	24
Salespersons, Retail	4362	158,570	177,997	19,427	12.3	11,661	25

1/ Standard Occupational Classification Code. Occupational Titles were given corresponding SOC codes based on information found in the Standard Occupational Classification Manual, 1980 Edition, U.S. Department of Commerce.

2/ The rank reflects the position of each occupation in terms of employability relative to the other occupations in the table. The lower the rank the higher the probability of employment. The rank is based on a composite score for each occupation resulting from independently ranking four occupational items, then summing the ranking for each occupation and creating a final composite rank. The four factors affecting employability are: projected 1995 employment; volume of growth in the number of new jobs 1984-1995; the rate of growth between 1984 and 1995; and the number of annual average total job openings projected for 1984-1995.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 34

PENNSYLVANIA

OCCUPATIONAL EMPLOYMENT PROBABILITY ASSESSMENT REPORT
RELATIVE RANKING AND GRADE
OF
TOP 100 OCCUPATIONS

The following list of 100 occupations have a higher degree of potential employability based on a combination of the following factors: Projected Employment (1995); Volume of Growth in number of new jobs; Rate of Employment Growth; and number of Annual Average Job Openings.

			LABOR DEMAND					EMPLOYMENT PROBABILITY	
OCCUPATION 5/	SOC CODE 1/	SVP 2/	ESTIMATED 1984 EMP.	PROJECTED 1995 EMP.	VOL. OF GROWTH	RATE OF GROWTH	ANN. AVE. JOB OPEN.	RANK 3/	GRADE 4/
AO Clerical/Admin Support Wkrs	4799	3	68482	77267	8785	12.8	3357	27	A
AO Food Service Workers	5210	2	32058	38736	6678	20.8	1906	20	A
AO Health Prof & Paraprof	3690	6	9537	11234	1697	17.8	312	69	B+
AO Management Support Workers	1490	7	47815	52172	4357	9.1	1626	56	B+
AO Managers & Administrators	VAR.	7	284218	321578	37360	13.1	17329	18	A
AO Mech, Install, & Repairers	6179	4	10038	11072	1034	10.3	477	97	B
AO Prof, Paraprof, & Tech Wkrs	9991	5	28349	31621	3272	11.5	987	55	A-
AO Sales & Related Workers	4400	6	173215	197527	24312	14.0	13425	15	A+
AO Service Workers	5200	2	42639	50207	7568	17.7	4834	15	A+
AO Teachers & Instructors	2390	7	44113	49634	5521	12.5	2761	32	A
AO Trans & Mat Mov Eq Opers	8319	3	21856	23089	1233	5.6	717	83	B+
Accountants & Auditors	1412	8	41105	50445	9340	22.7	2373	9	A+
Amusement/Recreation Attendants	5254	3	5455	6401	946	17.3	395	89	B
Artists & Commercial Artists	3220	7	6565	8101	1536	23.4	436	60	B+
Auto. & Motorcycle Mechanics	6111	6	33631	40959	7328	21.8	1680	14	A+
Automotive Body & Related Repairers	6115	7	10817	12490	1673	15.5	386	73	B+
Bakers, Bread & Pastry	5214	7	9069	11119	2050	22.6	638	52	A-
Bartenders	5212	2	23678	29333	5655	23.9	2025	12	A+
Bill & Account Collectors	4786	4	3974	5045	1071	27.0	301	76	B+
Billing, Cost & Rate Clerks	4716	4	16802	17855	1053	6.3	683	99	B
Bookkpg, Account & Audit Clerks	4712	5	87757	90357	2600	3.0	4422	63	B+
Brick Masons	6412	8	8074	9175	1101	13.6	344	83	B+
Bus Drivers, School	8215	3	16122	18052	1930	12.0	1094	61	B+
Bus/Truck Mech & Diesel Eng Spec	6112	7	15265	17173	1908	12.5	543	67	B+
Carpenters	6422	7	41225	48154	6929	16.8	2082	24	A
Cashiers	4364	3	87894	112928	25034	28.5	5007	2	A+
Child Care Workers	5264	3	22902	25140	2238	9.8	1195	62	B+
Civil Engineers, Inc Traffic	1628	8	6618	7650	1032	15.6	327	93	B
Clergy	2042	8	18038	20105	2067	11.5	1754	59	B+
College & University Faculty	2200	8	51014	55887	4873	9.6	2212	49	A-
Computer Op, Ex Peripheral Equip.	4612	6	11372	14414	3042	26.7	433	43	A-
Computer Programmers	3971	7	21214	33237	12023	56.7	1248	5	A+
Computer Systems Analysts,EDP	1712	7	15693	22468	6775	43.2	835	11	A+
Construction Trades Workers	VAR.	4	18268	20047	1779	9.7	545	74	B+
Cooks, Restaurant	5214	6	22557	29431	6874	30.5	1790	8	A+
Cooks,Institution or Cafeteria	5214	6	14603	17162	2559	17.5	945	49	A-
Cooks,Sh. Ord. & Sp. Fast Food	5214	6	27599	32706	5107	18.5	995	29	A
Correction Officers & Jailers	5133	4	7070	8269	1199	17.0	258	86	B
Cost Estimators	1490	7	7213	8282	1069	14.8	288	95	B
Counter & Rental Clerks	4363	2	5216	6069	853	16.4	401	99	B
Data Processing Equipment Rprs	6154	6	3128	4751	1623	51.9	177	77	B+
Dental Assistants	5232	6	7350	9985	2635	35.9	339	46	A-
Dental Hygienists	3630	6	3246	4433	1187	36.6	158	85	B
Dentists	2620	8	6902	8909	2007	29.1	883	36	A-
Designers, Exc. Interior Design	3220	7	6841	7849	1008	14.7	356	91	B
Dining Room/Caf Attend/Bar Hlpr	5218	2	16090	19895	3805	23.6	720	28	A
Electri. & Electro. Engineer	1633	8	15140	18493	3353	22.1	704	34	A-
Electrical & Electronic Techs	3711	7	13012	14990	1978	15.2	417	65	B+
Electricians	6432	7	22141	23817	1676	7.6	846	75	B+
Food Prep & Svc Wkr, Fast Food	5216	2	34227	40924	6697	19.6	1684	21	A

TABLE 34 (cont'd)

OCCUPATION 5/	SOC CODE 1/	SVP 2/	LABOR DEMAND: ESTIMATED 1984 EMP.	PROJECTED 1995 EMP.	VOL. OF GROWTH	RATE OF GROWTH	ANN. AVE. JOB OPEN.	EMPLOYMENT PROBABILITY: RANK 3/	GRADE 4/
Food Preparation Workers	5217	2	47296	57489	10192	21.5	3002	10	A+
Food Service & Lodging Managers	1351	7	15728	18467	2739	17.4	1035	48	A-
Gardener/Groundskeeper, Ex Farm	5622	2	24401	28777	4376	17.9	1898	30	A
General Office Clerks	4630	3	102003	111492	9489	9.3	5741	38	A-
Guards	5144	3	39235	48762	9527	24.3	4843	6	A+
Hairdresser/Stylist/Cosmetologist	5253	6	26912	34976	8064	30.0	1878	7	A+
Hand Packers & Packagers	8761	2	29827	31353	1526	5.1	1231	79	B+
Heat, A/C & Refrig Mech/Instlr	6160	7	11157	12687	1530	13.7	492	72	B+
Host/Hostess, Rest/Loun/Coffee Shp	5211	7	7510	9755	2245	29.9	517	45	A-
Housekeepers, Institutional	5241	6	3356	4483	1127	33.6	330	69	B+
Ins Adjust/Examin/Investigators	4782	7	7191	8365	1174	16.3	253	93	B
Instructors & Coaches, Sport	3400	8	9207	10493	1286	14.0	592	71	B+
Insurance Sales Workers	4122	5	23197	27033	3836	16.5	1527	34	A-
Janitor & Cleaner, Ind Maint	5244	2	133241	154476	21235	15.9	13122	12	A+
Laundry/Dry Mach Op/Tndr Ex Prs	7658	2	5695	6934	1239	21.8	513	64	B+
Lawyers	2110	8	23047	27613	4566	19.8	1849	26	A
Licensed Practical Nurses	3660	6	30097	35161	5064	16.8	1592	31	A
Loan & Credit Clerks	4642	4	4528	5539	1011	22.3	269	87	B
Maint Repairers, Gen Utility	6179	4	54205	59395	5190	9.6	2426	46	A-
Medical Assistants	5233	6	5166	8271	3105	60.1	478	41	A-
						0.0			
Nursing Aide, Orderlies/Attend	5236	4	53655	69611	15956	29.7	3485	3	A+
Operating Engineers	8312	6	13004	14252	1248	9.6	508	80	B+
Order Clerk, Mat, Merchan & Svc	4664	3	13013	14164	1151	8.8	536	87	B
Paralegal Personnel	3960	7	3326	5604	2278	68.5	325	57	B+
Physical Therapists	3033	7	2741	3845	1104	40.3	170	90	B
Physicians & Surgeons	2610	8	23776	28760	4984	21.0	2263	21	A
Pub Rel Specialist & Pub Writers	3320	7	3249	4148	899	27.7	217	95	B
Radiologic Technol. & Techni	3650	7	6060	7317	1257	20.7	174	92	B
Receptionist/Information Clerks	4645	4	27983	32160	4177	14.9	1535	41	A-
Registered Nurses	2900	7	85553	114267	28714	33.6	5268	1	A+
Roofers	6468	7	6587	7833	1246	18.9	235	82	B+
Sales Agents, Real Estate	4123	5	9306	11546	2240	24.1	875	38	A-
Salespersons, Retail	4362	3	158570	177997	19427	12.3	11661	25	A
Secretaries	4622	6	156137	168308	12171	7.8	5729	43	A-
Securities & Fin Svcs Sales Wkrs	4124	7	11598	15828	4230	36.5	1098	17	A
Social Welfare Service Aides	2032	3	9421	13153	3732	39.6	919	23	A
Social Workers	2032	7	18697	22338	3641	19.5	875	41	A-
Stock Clerks, Sales Floor	4362	3	61876	72043	10167	16.4	4821	18	A
Switchboard Operators	4732	3	11523	13519	1996	17.3	661	58	B+
Taxi Drivers & Chauffeurs	8216	3	4010	5058	1048	26.1	429	68	B+
Teach/Instruct, Voc Ed & Training	2390	7	8667	9731	1064	12.3	540	81	B+
Teacher Aide/Ed Assistant	4795	3	19327	22476	3149	16.3	928	51	A-
Teachers, Preschool & Elementa	2320	7	60695	67834	7139	11.8	2140	33	A
Teachers, Secondary School	2330	7	65044	70478	5434	8.4	1924	54	A-
Tellers	4791	5	27537	31102	3565	12.9	825	53	A-
Travel Agents	4369	5	3445	4452	1007	29.2	322	78	B+
Truck Drivers	8213	3	115405	126222	10817	9.4	4499	38	A-
Veh. Washers & Equip. Cleane	8750	2	7563	9065	1502	19.9	342	66	B+
Waiters and Waitresses	5213	3	84006	107057	23051	27.4	4427	4	A+
Writers & Editors	3980	7	7874	8872	998	12.7	375	98	B

TABLE 34 (cont'd)

1/ Standard Occupational Classification code. Occupational titles were given corresponding SOC codes based on information found in the Standard Occupational Classification Manual, 1980 Edition, U.S. Department of Commerce.

2/ Specific Vocational Preparation code. SVP denotes the training time required to learn the techniques, acquire information, and develop the facility needed for average performance in a specific job. The training may be acquired in a school, work, military, institutional, or vocational environment. Below are the SVP codes and the corresponding training time required.

2 - Anything beyond a short demonstration up to and including 30 days.
3 - Over 30 days up to and including 3 months.
4 - Over 3 months up to and including 6 months.
5 - Over 6 months up to and including 1 year.
6 - Over 1 year up to and including 2 years.
7 - Over 2 years up to and including 4 years.
8 - Over 4 years up to and including 10 years.

3/ The rank reflects the position of each occupation in terms of employability relative to the other occupations in the table. The lower the rank the higher the probability of employment. The rank is based on a composite score for each occupation resulting from independently ranking four occupational items, then summing the rankings for each occupation and creating a final composite rank. The four factors affecting employability are: projected 1995 employment; volume of growth in the number of new jobs 1984-1995; the rate of growth between 1984 and 1995; and the number of annual average total job openings projected for 1984-1995.

4/ The grading scheme is based on the rank assigned to each occupation. The top 10 percent are A+, A, and A-; the next 15 percent are B+, B, and B-; the next 45 percent are C+, C, and C-; with the remaining 30 percent as D+, D, and D-.

5/ AO represents 'All Others' - includes all other workers for that occupational grouping not separately classified.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 35

PENNSYLVANIA

EMPLOYMENT BY OCCUPATION AND ANNUAL AVERAGE JOB OPENINGS
1984 and Projected 1995

Occupational Grouping	Estimated 1984 Employment	Estimated 1995 Employment	Net Change 1984-95	Ann. Avg. Job Openings	% Dist. Of 1995 Empl.
TOTAL, ALL OCCUPATIONS	5,089,916	5,531,643	441,727	250,436	100.0
White Collar Workers	2,686,877	3,023,980	337,103	141,148	54.7
Managerial & Mgt. Rel. Occs.	459,636	518,435	58,799	25,827	9.4
Prof., Paraprof. & Tech. Occs	812,084	947,775	135,711	40,491	17.1
Marketing & Sales Occs.	537,278	629,092	91,816	39,414	11.4
Admin. Support Occs., Inc. Clerical	877,901	928,678	50,777	35,416	16.8
Blue Collar Workers	1,534,354	1,481,031	(53,323)	46,172	26.8
Precision Production, Craft & Repair	624,109	636,887	12,778	22,788	11.5
Operators & Fabricators	697,371	634,292	(63,079)	17,902	11.5
Helpers, Laborers & Mat. Mov. Occs.	212,874	209,852	(3,022)	5,482	3.8
Service Workers	777,974	936,230	158,256	57,838	16.9
Cleaning & Bldg. Serv. Occs.	135,050	156,383	21,333	13,180	2.8
Food & Bev. Prep. & Serv.	318,693	393,606	74,913	18,847	7.1
Health Service Occs.	80,155	103,957	23,802	4,956	1.9
Personal Serv. Occs.	74,663	90,853	16,190	5,218	1.6
Protective Serv. Occs.	97,510	110,893	13,383	6,967	2.0
Other Service Occs.	71,903	80,538	8,635	8,872	1.5
Agric., Forestry, Fishing & Rel. Occs.	90,713	90,402	(311)	5,287	1.6

SOURCE: Bureau of Research and Statistics
Department of Labor and Industry

Data may not add to totals due to rounding.

V. TRAINING AND PLACEMENT ASSISTANCE INFORMATION

A. Labor Supply

Section V deals primarily with a comparison of labor supply and labor demand in the state of Pennsylvania.

The supply of labor comes from a variety of sources: graduates of educational programs, new residents of the area, retraining within an industry, and people seeking to change jobs. Only the first of these sources can be measured accurately, since the government has no consistent method to determine the extent of the others. Many of these people, but by no means all, register for work in Job Service local offices. Nevertheless, a look at applicants registered for work, together with the numbers of persons completing educational programs, gives a good estimate of the supply of labor.

During the 1985-86 school year 186,383 persons completed vocational education programs in Pennsylvania. Table 36 presents data on the number of completers for all vocational education curricula by education level (secondary, adult, or post-secondary). Of the completers, 42,742 were classified as secondary, 137,442 as post-secondary and 6,199 as adults.

Business led all programs by far with 66,310 completers, followed by trade and industrial occupations at 20,968, and health at 18,310. Percentage wise, 35.6 percent of the total completers were in business programs, 11.2 percent completed programs in the trade and industrial occupations, while 9.8 percent completed programs in the health field.

In the secondary classification level the most popular curricula programs were business, 18,577 completers; trade and industrial occupations, 11,334 completers; and agriculture, 2,150 completers. For adult completers the order was trade and industrial occupations, 2,218, business, 1,542 and health occupations, 1,401. Post-secondary schools reported business, health and engineering programs as the most frequently completed curricula. For a more comprehensive look at Pennsylvania's labor supply provided by training institutions please refer to the publication, Pennsylvania Occupational Information System, Labor Supply/Demand Relationship Component, produced by the Research and Statistics Division, Pennsylvania Office of Employment Security.

A listing of schools offering vocational-technical programs is given in Chart 2.

Some idea of future labor supply can be discerned from an examination of school enrollment patterns as detailed in Table 37. During the 16-year period from 1972 to 1988 public school enrollment declined steadily each year from 2,361,285 in 1972 to 1,668,542 in 1988, a drop of 29.3 percent. Enrollment in non-public schools, which did show small increases in two academic years, has suffered a net decline of 21.7 percent during the same period. On the positive side, the 0.34 percent enrollment decline among public schools from the 1986-87 school year to the 1987-88 school year represents the smallest decline since the early 1970s. Generally speaking, yearly percent declines in public school enrollment have dropped to one percent or below during recent years while that of non-public schools have remained above two percent.

There are several reasons for the drop-off in school enrollments: declining population in general, a lower birthrate with many two-career couples postponing the start of a family, and out-migration of young adults with school-age children in order to seek employment elsewhere. The impact of this trend is significant for the state in terms of job opportunities for teachers and for its implication of a sharp reduction in new entrants to the labor force in future years.

Further data on labor supply (i.e., the number of registered job applicants in Job Service local offices) will be presented and discussed in the following section.

TABLE 36

PENNSYLVANIA

EDUCATION CURRICULUM COMPLETERS 1/
(1985-1986 SCHOOL YEAR)
SUMMARY

CIP CODE 2/	EDUCATIONAL PROGRAM	COMPLETERS				
		SECONDARY	ADULT	POST SECONDARY	TOTAL	PERCENT DISTRIBUTION
--	TOTAL	42,742	6,199	137,442	186,383	100.0
01-03	AGRICULTURE	2,150	23	1,953	4,126	2.2
06-08	BUSINESS	18,577	1,542	46,191	66,310	35.6
11	COMPUTER AND INFORMATION SCIENCES	878	283	7,023	8,184	4.4
12	CONSUMER, PERSONAL AND MISC SVCS	1,879	49	636	2,564	1.4
13	EDUCATION	0	0	8,240	8,240	4.4
14-15	ENGINEERING	1,520	333	12,552	14,405	7.7
17-18	HEALTH	1,684	1,401	15,215	18,310	9.8
19-20	HOME ECONOMICS	2,095	291	1,979	4,365	2.3
22	LAW	0	0	2,572	2,572	1.4
43	PROTECTIVE SERVICES	22	49	1,839	1,910	1.0
46-49	TRADE AND INDUSTRIAL	11,334	2,218	7,416	20,968	11.2
--	NOT ELSEWHERE CLASSIFIED	2,593	10	31,826	34,429	18.5

1/ TABLE INCLUDES PROGRAM COMPLETERS OF APPROXIMATELY 1400 SEPARATE INSTRUCTIONAL PROGRAMS OFFERED THROUGHOUT THE COMMONWEALTH BY SECONDARY SCHOOLS, PUBLIC SECONDARY SCHOOLS OFFERING ADULT TRAINING, PRIVATE TRADE AND TECHNICAL SCHOOLS, PRIVATE BUSINESS SCHOOLS, COMMUNITY COLLEGES, COLLEGES AND UNIVERSITIES, AND JOB TRAINING PARTNERSHIP ACT (JTPA) PROGRAMS.

2/ CIP (CLASSIFICATION OF INSTRUCTIONAL PROGRAMS)--A CLASSIFICATION SYSTEM DEVELOPED BY THE U.S. DEPARTMENT OF EDUCATION AND NATIONAL CENTER FOR EDUCATION STATISTICS. IT IS INTENDED TO REPLACE THE HEGIS TAXONOMY AND FILL A VOID IN HANDBOOK VI (USOE) CODES WITH REGARDS TO INSTRUCTIONAL PROGRAMS.

SOURCE: PENNSYLVANIA DEPARTMENT OF EDUCATION

TABLE 37
PENNSYLVANIA
SCHOOL ENROLLMENT 1972-1988

PUBLIC

YEAR	Elementary K - 6	Secondary 7 - 12	Total	% Change From Prior Year
1972-73	1,224,959	1,136,326	2,361,285	
1973-74	1,183,777	1,137,660	2,321,437	-1.69
1974-75	1,149,633	1,127,818	2,277,451	-1.89
1975-76	1,129,451	1,116,696	2,246,147	-1.37
1976-77	1,093,578	1,100,095	2,193,673	-2.34
1977-78	1,054,040	1,074,833	2,128,873	-2.95
1978-79	1,008,664	1,038,082	2,046,746	-3.86
1979-80	968,325	1,000,476	1,968,801	-3.81
1980-81	940,387	968,905	1,909,292	-3.02
1981-82	903,342	935,673	1,839,015	-3.68
1982-83	872,629	911,340	1,783,969	-2.99
1983-84	846,145	891,807	1,737,952	-2.58
1984-85	833,996	867,884	1,701,880	-2.08
1985-86	841,419	841,802	1,683,221	-1.10
1986-87	856,962	817,199	1,674,161	-0.54
1987-88	874,784	793,758	1,668,542	-0.34

NON-PUBLIC

YEAR	Elementary K - 6	Secondary 7 - 12	Total	% Change From Prior Year
1972-73	334,165	121,937	456,102	
1973-74	321,056	122,939	443,995	-2.65
1974-75	310,669	122,723	433,392	-2.39
1975-76	306,037	121,932	427,969	-1.25
1976-77	302,387	121,667	424,054	-0.91
1977-78	296,973	119,730	416,703	-1.73
1978-79	289,630	116,855	406,485	-2.45
1979-80	285,514	114,441	399,955	-1.61
1980-81	280,319	112,083	392,402	-1.89
1981-82	281,357	112,742	394,099	0.43
1982-83	288,665	112,963	401,628	1.91
1983-84	285,372	110,861	396,233	-1.34
1984-85	278,236	107,784	386,020	-2.58
1985-86	270,541	103,857	374,398	-3.01
1986-87	267,241	99,438	366,679	-2.06
1987-88	263,579	93,434	357,013	-2.64

SOURCE: Public and Nonpublic School Enrollment 1972-88, Pennsylvania Department of Education

B. Labor Demand

The demand for labor stems from a variety of sources: new employers who move into the area; business expansions by existing employers; and, by far the largest source, the need to replace workers who retire, die, become disabled, change jobs, are promoted, or leave the area. This last factor, which is known as labor turnover, accounts for about 85 percent of total labor demand. The demand for workers varies considerably among industries and occupations.

Table 38 shows the estimated 1984 and projected 1995 distribution of broad occupational categories within selected industries in Pennsylvania. This format was chosen because it clearly depicts the staffing (human resource) structure of industry within the state. A typical example illustrating use of the table would be that of a clerical worker in search of employment. The job-seeker would first enter the table in the Administrative Support Occupations Including Clerical row and then proceed across to find the highest totals. Immediately Finance, Insurance and Real Estate, and Trade Services, stand out with the highest total employment for both 1984 and 1995. The job search would obviously begin with these industries. Continued analysis indicates that Services has the greatest number of professional, paraprofessional, and technical occupations, as well as the largest number of managerial and management related occupations. Tracking specific occupations (accountants, welders, etc.) within any of the broad categories listed is possible by consulting reference volumes of staffing patterns prepared by the Occupational Employment Statistics and Industrial Surveys Division, Bureau of Research and Statistics. Area Labor Market Analysts have these publications on file.

TABLE 38
PENNSYLVANIA

OCCUPATIONAL EMPLOYMENT SUMMARY BY MAJOR INDUSTRY DIVISION 1/

1984 and Projected 1995

	Year	Total All Industries	Agri. & Related	Mining	Construction	Manufacturing	Trans., Comm., & Utilities	Trade	Finance, Ins., & Real Est.	Services 2/	Govt.
Total All Occupations	1984	4,715,902	41,273	38,678	175,698	1,124,001	245,015	1,033,055	251,888	1,417,044	389,252
	1995	5,154,320	43,427	33,538	208,899	953,234	245,284	1,219,801	304,122	1,754,604	391,411
Managerial & Mgt. Rel. Occupations	1984	416,824	1,045	2,734	17,690	87,159	19,389	93,759	45,678	98,972	50,398
	1995	482,540	1,295	2,550	21,841	82,182	19,759	114,724	58,893	129,318	51,978
Professional, Paraprof., & Technical Occpns.	1984	741,723	1,942	1,398	5,548	85,915	20,184	18,401	9,750	536,273	62,312
	1995	871,691	2,476	1,304	6,320	82,463	21,640	22,883	13,755	655,926	64,924
Marketing & Sales Occupations	1984	470,761	467	290	2,369	33,306	10,536	354,931	33,832	29,961	5,089
	1995	556,550	545	302	2,878	30,017	11,779	424,100	42,331	39,241	5,357
Adm. Support Occpns. Incl. Clerical	1984	856,831	1,997	2,649	17,392	131,455	53,385	138,989	140,124	260,508	110,332
	1995	910,860	2,123	2,270	18,543	106,408	50,455	147,785	182,483	316,786	104,007
Service Occupations	1984	736,279	507	415	1,141	19,898	6,277	247,408	11,439	370,034	79,160
	1995	889,650	531	306	1,242	16,145	6,818	307,162	13,272	461,815	82,259
Ag., Forest., Fish. & Rel. Occpns.	1984	53,443	31,852	43	564	2,355	80	1,996	3,522	10,236	2,795
	1995	56,893	32,553	44	653	2,531	83	2,498	4,028	11,713	2,790
Precision Prod., Craft & Repair Occpns.	1984	557,394	951	15,400	93,493	210,464	51,509	78,248	6,627	58,420	42,282
	1995	568,909	1,101	13,399	113,587	176,892	47,978	91,949	8,274	73,163	42,566
Operators & Fabricators	1984	673,171	1,449	11,506	13,649	454,861	67,285	62,594	535	37,489	23,803
	1995	610,617	1,636	10,098	16,429	373,156	69,997	67,410	637	46,741	24,513
Helpers, Laborers & Mat. Mov. Occpns.	1984	209,476	1,063	4,243	23,852	98,588	16,370	36,729	378	15,151	13,101
	1995	206,610	1,187	3,265	27,406	83,440	16,775	41,290	449	19,801	13,017

1/Excludes self-employed and unpaid family workers.

2/Includes state and local government employment in hospitals and education.

SOURCE Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

C. Labor Supply and Demand

The comparison of labor supply and demand is always difficult, since neither figure can be precisely measured. Nevertheless, some broad conclusions can be drawn on the basis of a comparison of applicants registered in Job Service local offices with the job openings received by those offices. Figures for Pennsylvania are given in Table 39.

From July 1, 1987, through June 30, 1988, 663,419 applicants have registered with State Employment Security Offices in Pennsylvania. Of this number 152,875 or 23.0 percent were in the clerical and sales occupations category while 110,765 applicants or 16.7 percent were categorized in service occupations. Agriculture, fishing and forestry occupations had the fewest registered applicants with 5,843. Approximately 27 percent or 176,610 of total registrants were in the active file as of the end of June with 64,486 of the number females.

During the year, the following fifteen specific occupations each had more than 5,000 registered applicants assigned to them. In order they are: material handler (21,280), general clerk (12,793), construction worker I (11,300), commercial cleaner (11,156), construction worker II (8,694), clerical secretary (8,063), nurse aide (7,788), administrative clerk (7,499), waiter/waitress (6,838), hand packager (6,722), heavy truck driver (6,133), sales clerk (6,101), clerk-typist (6,010), general merchandise salesperson (5,785), and tractor-trailer truck driver (5,725).

On June 30, 1987, the active file contained over 2,000 registered applicants each in nine occupations. In descending order they were: material handler (5,444), construction worker I (3,607), general clerk (3,066), construction worker II (2,857), commercial cleaner (2,296), clerical secretary (2,224), administrative clerk (2,123), heavy truck driver (2,043), and carpenter (2,035).

Job Service local offices received a total of 220,601 job openings during the same time period, an average of one opening for every three registered applicants. Of these openings, 155,644 or just over 70 percent, were filled during the fiscal year. It might seem odd that almost 30 percent of the openings went unfilled despite large numbers of registered job-seekers. This is because some of the job orders were subsequently cancelled by the employer, some were filled by the employer with applicants who were not referred by Job Service, some were for workers with highly specialized technical skills and lengthy experience requirements that could not be found among the registered applicants, and some were received only a few days before the end of the fiscal year and had not yet been filled by June 30th.

Just as clerical, sales, and service occupations accounted for the largest numbers of job applicants, so too did these fields constitute the bulk of the job openings received. Miscellaneous occupational openings was the next largest group, accounting for 15.3 percent of the openings, followed by structural work occupations with 10.0 percent and professional, technical and managerial occupations with 7.4 percent of the total. There were 2,851 openings in agricultural occupations, compared with 5,843 registered job applicants. In all broad occupational areas applicants outnumbered listed openings; the average ratio was 3.01 applicants for each opening. This ratio of applicants to openings ranged from a low of 2.05 for agriculture, fishing and forestry jobs to 4.75 for professional, technical and managerial occupations.

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS

BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
XXX	TOTAL - ALL OCCUPATIONS (INCL. ENTRY)	863,419	176,610	64,486	220,601	155,644
0 & 1	PROFESSIONAL, TECHNICAL, MANAGERIAL OCC.	77,563	23,765	9,037	16,326	11,881
2	CLERICAL AND SALES OCCUPATIONS	152,875	37,178	26,628	53,258	35,140
3	SERVICE OCCUPATIONS	110,765	23,810	12,171	56,825	41,383
4	AGRICULTURE, FISHING, FORESTRY OCCUP.	5,843	1,505	179	2,851	2,415
5	PROCESSING OCCUPATIONS	22,768	8,765	1,310	9,398	7,637
6	MACHINE TRADES OCCUPATIONS	48,371	14,440	1,861	12,216	7,572
7	BENCHWORK OCCUPATIONS	39,079	10,169	5,920	13,940	10,087
8	STRUCTURAL WORK OCCUPATIONS	91,264	30,271	1,878	22,042	14,289
9	MISCELLANEOUS OCCUPATIONS	113,750	28,618	5,680	33,670	25,162
INA	INVALID CODES	1,142	89	24	75	78

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

[continued]

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
003.161-014	Electrical Test Engineer	1,578	550	25	99	41
007.061-014	Engineer, Mechanical	628	194	7	56	8
012.167-066	Systems Analyst	691	230	56	77	10
020.162-014	Programmer, Business	864	197	70	81	16
029.261-010	Laboratory Tester	415	113	34	128	51
045.107-010	Counselor	758	206	89	99	52
075.374-010	Nurse, General Duty	555	124	113	145	37
079.367-010	Medical Assistant	772	174	150	44	15
079.371-010	Dental Assistant	628	174	163	78	28
079.374-014	Nurse, Licensed Practical	1,392	306	284	385	222
091.227-010	Teacher, Secondary School	1,113	305	157	5,412	5,382
092.227-010	Teacher, Elementary School	1,063	296	236	90	81
160.167-010	Accountant	1,985	642	232	161	61
162.157-038	Purchasing Agent	923	343	83	41	10
163.167-018	Sales Manager	1,932	643	106	38	3
165.067-010	Public-Relations Representative	567	180	125	17	5
169.167-010	Administrative Assistant	2,573	824	568	127	40
169.167-034	Office Manager	2,359	819	584	96	40
185.167-046	Retail Store Manager	3,888	1,209	543	303	69
187.167-106	Food Service Manager	2,150	678	263	108	49
195.107-010	Caseworker	518	158	100	162	124
201.362-010	Legal Secretary	1,033	307	298	180	68

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

[continued]

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
201.362-014	Medical Secretary	852	251	243	85	39
201.362-030	Clerical Secretary	8,063	2,224	2,170	1,460	509
203.362-010	Clerk-Typist	6,010	1,443	1,360	1,846	1,095
203.582-030	Keypunch Operator	589	138	127	411	342
205.367-054	Survey Worker	184	95	64	534	88
206.362-010	File Clerk	455	114	89	262	186
209.562-010	Clerk-General	12,793	3,066	2,640	5,285	4,248
209.587-026	Mail Clerk	756	208	88	479	361
209.687-014	Mail Handler	206	53	18	670	639
210.382-014	Bookkeeper	2,875	814	715	557	180
210.382-018	Bookkeeper II	827	247	232	181	69
211.382-010	Cashier I	2,266	477	426	495	317
211.382-018	Teller	1,072	288	237	913	647
211.462-010	Cashier II	3,796	761	682	1,618	1,048
213.382-010	Computer Operator	2,685	796	386	288	133
215.482-010	Payroll Clerk	579	183	146	114	58
216.482-010	Accounting Clerk	2,971	865	699	624	284
219.362-010	Administrative Clerk	7,499	2,123	1,939	1,599	840
222.387-058	Clerical Stock Clerk	2,947	581	129	1,969	1,727
235.662-022	Telephone Operator	439	134	128	173	110
237.367-038	Receptionist	3,984	1,029	1,007	1,040	396
238.362-010	Hotel Clerk	412	90	59	494	380

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

[continued]

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
241.357-010	Collection Clerk	235	52	30	174	132
249.367-074	Teacher Aide	648	150	139	696	651
250.257-010	Sales Agent	494	154	41	436	31
261.357-062	Salesperson, Shoes	305	80	50	202	80
261.357-066	Women's Apparel Salesperson	555	174	170	578	375
273.353-010	Automobile Salesperson	804	288	24	106	28
279.357-050	General Hardware Salesperson	622	88	27	505	362
279.357-054	General Merchandise Salesperson	5,785	819	454	3,827	3,404
279.357-062	Salesperson, Parts	447	142	20	253	93
290.477-014	Sales Clerk	6,101	1,295	1,038	2,714	1,885
290.477-018	Sales Clerk, Food	1,306	288	176	1,448	985
292.353-010	Sales Route Driver	1,324	388	20	681	290
299.137-010	Manager, Department (Retail Trade)	639	170	84	80	74
299.357-014	Telephone Solicitor	734	211	155	911	317
301.474-010	General House Worker	498	78	77	228	57
309.677-010	Companion	454	103	98	139	83
311.477-014	Counter Attendant	1,600	237	200	1,825	1,155
311.477-030	Informal Waiter/Waitress	6,838	1,294	1,170	5,157	4,047
311.677-010	Cafeteria Attendant	384	92	82	190	123
312.474-010	Bartender	2,394	614	321	525	197
313.131-014	Chef	446	159	26	38	14
313.361-014	Cook	4,236	1,080	491	1,977	878

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

[continued]

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
313.361-022	Short Order Cook	2,479	531	212	1,015	406
315.361-010	Institutional Cook	1,437	391	150	398	161
316.684-018	Meat Cutter	717	213	8	145	60
317.684-014	Pantry Goods Maker	259	58	48	144	62
317.687-010	Cook Helper	411	92	41	102	50
318.687-010	Kitchen Helper	4,750	925	336	2,823	1,434
323.687-010	Hospital Cleaner	496	125	81	217	115
323.687-014	Housekeeping Cleaner	2,190	459	406	1,003	585
332.271-010	Cosmetologist	1,050	207	191	98	21
355.674-014	Nurse Aide	7,788	1,516	1,325	2,442	1,787
355.677-010	Hospital Food Service Worker	915	193	145	324	196
359.677-010	Children's Institution Attendant	360	83	60	731	588
359.677-018	Nursery School Attendant	629	124	118	139	69
361.687-018	Laundry Laborer	210	44	27	118	83
363.682-018	Machine Presser	655	151	78	176	111
363.684-018	Hand Presser	464	90	78	137	94
372.667-018	Correction Officer	265	99	13	414	393
372.667-034	Security Guard	4,985	1,482	117	2,661	1,910
372.667-038	Merchant Patroller	1,350	337	43	1,092	793
381.687-014	Commercial Cleaner	11,156	2,296	740	15,674	14,143
403.687-018	Harvest Worker, Fruit	244	9	0	0	0
406.684-010	Cemetery Worker	86	24	0	334	293
408.161-010	Landscape Gardener	471	138	13	61	26

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

[continued]

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
410.684-010	Dairy Farmworker	213	30	1	5	2
509.686-010	General Laborer	4,247	1,296	64	1,548	1,427
519.687-022	General Foundry Worker	811	275	20	585	502
526.381-010	Baker	382	107	34	103	43
526.684-010	Doughnut Maker	84	22	10	118	91
526.686-010	Batter Scaler	288	76	29	195	140
529.686-014	Cannery Worker	222	58	42	571	505
529.687-186	Sorter, Agricultural Produce	33	9	7	134	133
556.685-038	Injection Molding Machine Tender	274	61	34	238	206
559.567-010	Plastic Material Laborer	50	9	2	251	230
579.687-030	Glass Product Selector	324	118	69	180	172
600.280-022	Machinist	2,977	834	16	702	345
600.380-018	Machine Set-Up Operator	840	247	15	212	143
601.280-046	Tool and Die Maker	445	154	3	56	19
604.685-026	Lathe Operator	371	83	6	104	62
609.684-014	General Machine Shop Laborer	626	180	32	457	349
609.685-018	Production-Machine Tender	2,579	724	249	1,208	1,038
615.482-022	Punch-Press Operator	498	152	39	81	53
620.261-010	Automobile Mechanic	4,819	1,349	21	1,087	350
620.261-022	Construction-Equipment Mechanic	713	249	3	53	15
625.281-010	Diesel Mechanic	900	306	4	218	78

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 38

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
625.281-034	Small Engine Mechanic	250	72	0	102	40
637.261-014	Environmental-Cntrl-Syst Installer/Serv.	626	224	1	157	51
638.281-014	Maintenance Mechanic	2,423	840	11	493	197
638.281-018	Millwright	913	313	2	89	51
660.280-010	Woodworking Cabinetmaker	350	121	4	94	45
690.682-082	Standard Machine Stitcher	217	52	50	283	230
721.684-022	Electric-Motor Assembler	144	37	21	81	37
726.684-018	Electronics Assembler	1,846	496	381	947	706
729.687-010	Assembler, Electrical Accessories	306	100	71	54	22
739.687-030	Small Product Assembler	556	146	86	217	155
741.684-026	Spray Painter	653	194	16	167	103
781.687-010	Assembler	248	41	34	96	75
782.684-058	Sewer, Hand	380	124	111	102	43
787.682-046	Sewing-Machine Operator	2,595	589	567	1,015	651
788.684-054	Hand Sewer, Shoes	4	1	1	137	143
804.281-010	Sheet-Metal Worker	970	329	10	208	72
806.381-058	Trailer Assembler	90	28	3	101	62
806.684-010	Automobile Assembler	1,232	687	78	241	246
807.381-010	Automobile-Body Repairer	1,656	416	6	328	110
819.384-010	Combination Welder	2,402	800	13	333	164
824.261-010	Electrician	2,686	962	10	463	250
828.281-010	Electronics Mechanic	1,788	583	21	146	76

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
829.281-014	Electrical Repairer	898	207	4	217	139
840.381-010	Construction Painter	2,194	659	11	423	202
844.364-010	Cement Mason	673	264	3	142	51
859.683-010	Operating Engineer	3,372	1,252	16	228	107
860.381-022	Carpenter	5,878	2,035	21	1,200	604
861.381-018	Bricklayer	855	324	4	236	85
862.381-018	Pipe Fitter	1,053	403	6	75	27
862.381-030	Plumber	787	273	3	179	73
862.684-014	Construction or Leak Gang Laborer	331	100	2	87	46
866.381-010	Roofer	1,474	455	7	278	128
869.664-014	Construction Worker I	11,300	3,607	72	2,759	1,708
869.684-010	Assembler I	267	79	4	544	521
869.687-026	Construction Worker II	8,694	2,857	60	4,515	3,043
899.281-014	Factory or Mill Maintenance Repairer	733	249	2	151	78
899.381-010	Building Maintenance Repairer	4,196	1,248	20	1,936	1,626
904.383-010	Tractor-Trailer-Truck Driver	5,725	1,751	31	1,768	749
905.683-014	Heavy Truck Driver	6,133	2,043	37	1,008	542
906.683-022	Light Truck Driver	2,709	823	34	814	404
913.463-010	Bus Driver	2,403	683	386	700	553
915.467-010	Automobile Service Station Attendant	1,146	263	7	646	247
915.473-010	Parking Lot Attendant	173	53	2	102	45
919.687-014	Transportation Vehicle Cleaner	484	97	17	425	247

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 39

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

[continued]

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
920.587-018	Hand Packager	6,722	1,767	1,392	3,952	3,183
920.685-078	Machine Packager	1,007	319	196	389	339
920.687-014	Grocery Bagger	176	36	12	572	511
921.663-010	Bridge- or Gantry-Crane Operator	1,123	325	8	71	62
929.686-010	Bakery Worker	171	64	30	232	191
929.687-022	Laborer, Salvage	380	136	16	157	100
929.687-030	Material Handler	21,280	5,444	598	13,867	12,145
971.381-050	Stripper, Printing	67	23	9	115	109

SOURCE: Bureau of Research and Statistics, Employment Security Automated Reporting System (ESARS) Table 98, June 30, 1988.

NOTES: Active date are for June 30, 1988.

All other data are the totals for the Fiscal Year to Date.

The number of Job Openings filled may exceed the number of openings received because of openings on hand at the beginning of the Fiscal period in addition to openings received during the current Fiscal period.

* Fiscal Year to Date - July 1, 1987 through June 30, 1988.

VI. CHARACTERISTICS AND TRENDS IN UNEMPLOYMENT

During 1987, unemployment in Pennsylvania fell to its lowest point since 1974. On an annual average basis there were 320,000 Pennsylvania residents out of work during 1987, a drop of 66,000 since 1986 and the lowest jobless figure since 1974 when 259,000 residents were unemployed. Unemployment, as a percent of the civilian labor force, fell to 5.7 percent in 1987, a significant decrease from the double-digit rates of 1982 and 1983. Table 40 provides further historical labor force data (1975 through 1987) for the sum of Pennsylvania's Metropolitan Areas, the state of Pennsylvania as a whole and for the nation. For comparative purposes the United States 1987 average unemployment rate of 6.2 percent equates to 7,425,000 out of work, lowest since 1979.

The insured unemployed are those unemployed persons who are currently receiving unemployment compensation benefits. They constitute much of the unemployed, usually 30 to 45 percent, but they are only part of the total. There are other groups of job-seekers who are not part of this group: exhaustees (persons who have exhausted their benefits), people who were disqualified from receiving benefits for either monetary or nonmonetary reasons, new entrants and reentrants to the labor force, persons who were laid off from industries not covered by the Pennsylvania Unemployment Compensation Law, and persons covered by private unemployment systems (e.g., railroad workers). Persons who fall into these groups are still considered to be unemployed and are included in the total estimate of unemployed persons. However, it is not possible to determine characteristics of individuals in these groups, since most of them do not file claims for unemployment compensation (UC) benefits and some do not even enter a unemployment compensation claims office. Hence, it is possible to study the characteristics only of the insured unemployed, since they file a unemployment compensation claim and provide a variety of information for statistical purposes.

Characteristics of the insured unemployed are given in Table 41 for the state of Pennsylvania for the four quarters of 1987. Over 63 percent of the unemployment compensation recipients were men, a reflection of the numbers of people laid off from the state's durable goods factories. Men were even more heavily represented during the first quarter, when winter weather causes layoffs in construction and agriculture. Over half of the claimants (55.37 percent) were between the ages of 25 and 44, the result of layoffs of younger workers with little seniority, as well as the difficulty always encountered by those who have little on-the-job experience. Over one-fifth of the claimants last worked in durable goods manufacturing, while wholesale/retail trade combined with services/miscellaneous (including government) to account for over 35 percent. Over 17 percent were laid off from construction jobs.

Among occupations, structural workers had the highest share of unemployment for 1987 with an average of 22.44 percent of the total. The 26.94 percent recorded in the first quarter was the highest quarterly percentage recorded during the year for any occupation listed.

Table 42 ranks the 40 labor market areas in Pennsylvania by their 1986 and 1987 annual average unemployment rates. Affected by the slump in the coal industry and reflecting patterns similar to its West Virginia neighbor, and Waynesburg LMA was the state's leader again in this statistical category with a 1987 rate of 13.2 percent. Beaver County PMSA, which tied the Waynesburg LMA for first place last year, is beginning to show some improvement due to a recent upturn in heavy manufacturing and a gradual diversification of the area's economy. Lancaster, displaying the lowest rate (4.5 percent) in 1985, repeated the feat in 1986 and again in 1987, with unemployment averaging 3.8 percent of the civilian labor force. The top twelve LMA's, with unemployment rate of 8.0 percent or above in 1987, are all located in the western part of the state. All of the twelve areas with rates below the state average, are redundant in the eastern or central half. This indicates that western Pennsylvania has been slower to recover from the recession than the eastern half of the state.

Table 43 is a listing of Labor Surplus Areas in Pennsylvania. These are areas whose jobless rate is significantly higher than the national average for a 24-month reference period. Employers who are located in Labor Surplus Areas are eligible for preference in bidding on federal government procurement contracts under Defense Manpower Policy No. 4B and Executive Orders 12073 and 10582 (implementing the Buy American Act). Listed are the counties, cities, and townships eligible for federal procurement contracts from October 1, 1988, through September 30, 1989.

TABLE 40

CIVILIAN LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT, AND UNEMPLOYMENT RATE

METROPOLITAN AREA, PENNSYLVANIA, AND UNITED STATES
1975-1987 Annual Averages

(in Thousands)

YEAR	CIVILIAN LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	RATE(%)
		METROPOLITAN AREA *		
1975	4,389.0	4,030.2	358.7	8.2
1976	4,406.5	4,061.9	344.6	7.8
1977	4,464.4	4,123.3	341.1	7.6
1978	4,550.7	4,241.0	309.7	6.8
1979	4,582.5	4,274.2	308.2	6.7
1980	4,641.4	4,292.1	349.3	7.5
1981	4,687.6	4,308.1	379.5	8.1
1982	4,690.6	4,198.2	492.4	10.5
1983	4,707.1	4,176.1	530.9	11.3
1984	4,695.3	4,284.4	410.9	8.8
1985	4,743.1	4,380.3	362.8	7.6
1986	4,840.4	4,524.0	316.3	6.5
1987	4,853.9	4,592.4	261.6	5.4
		PENNSYLVANIA		
1975	5,098.0	4,674.0	423.0	8.3
1976	5,129.0	4,723.0	407.0	7.9
1977	5,207.0	4,806.0	401.0	7.7
1978	5,306.0	4,938.0	368.0	6.9
1979	5,360.0	4,990.0	371.0	6.9
1980	5,435.0	5,010.0	425.0	7.8
1981	5,484.0	5,026.0	459.0	8.4
1982	5,489.0	4,889.0	599.0	10.9
1983	5,505.0	4,855.0	650.0	11.8
1984	5,478.0	4,980.0	498.0	9.1
1985	5,527.0	5,084.0	443.0	8.0
1986	5,636.0	5,250.0	386.0	6.8
1987	5,648.0	5,328.0	320.0	5.7
		UNITED STATES		
1975	93,775.0	85,846.0	7,929.0	8.5
1976	96,158.0	88,752.0	7,406.0	7.7
1977	99,009.0	92,017.0	6,991.0	7.1
1978	102,251.0	96,048.0	6,202.0	6.1
1979	104,962.0	98,824.0	6,137.0	5.8
1980	106,940.0	99,303.0	7,637.0	7.1
1981	108,670.0	100,397.0	8,273.0	7.6
1982	110,204.0	99,526.0	10,678.0	9.7
1983	111,550.0	100,834.0	10,717.0	9.6
1984	113,544.0	105,005.0	8,539.0	7.5
1985	115,461.0	107,150.0	8,312.0	7.2
1986	117,834.0	109,597.0	8,237.0	7.0
1987	119,865.0	112,440.0	7,425.0	6.2

* METROPOLITAN AREA is the sum of all Pennsylvania Counties located in Metropolitan Statistical Areas (MSAs).

SOURCES: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics. Pennsylvania Dept. of Labor and Industry, Bureau of Research and Statistics.

GRAPH 5
UNEMPLOYMENT RATES
UNITED STATES AND PENNSYLVANIA
(SEASONALLY ADJUSTED)

MONTHLY AVERAGES 1978 - 1988

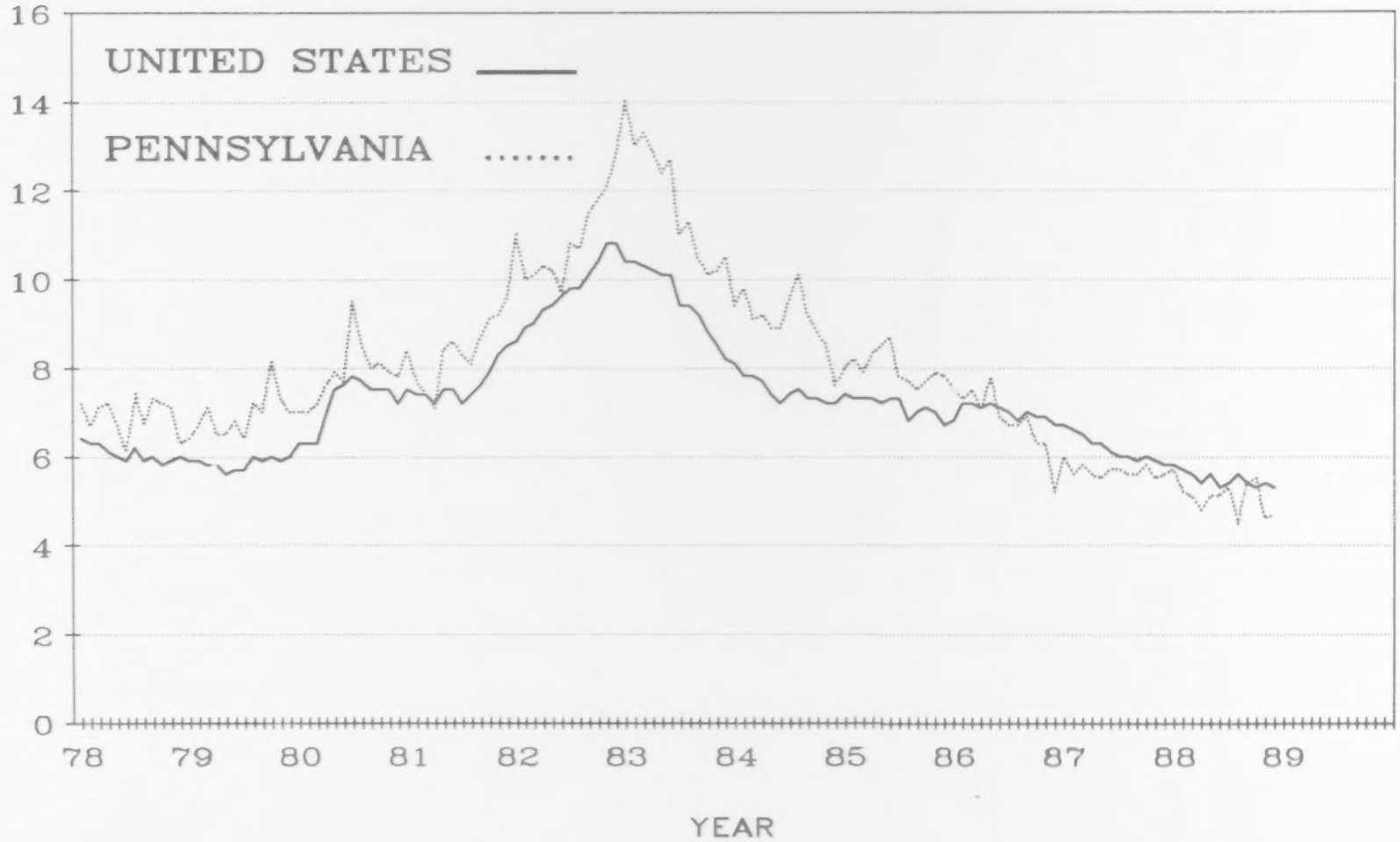


TABLE 41

PENNSYLVANIA
CHARACTERISTICS OF THE INSURED UNEMPLOYED

(Vertical Percent Distribution)

CHARACTERISTIC	1st Qtr 1987	2nd Qtr 1987	3rd Qtr 1987	4th Qtr 1987	Annual Average 1987
BOTH SEXES	100.00	100.00	100.00	100.00	100.00
Male	70.11	62.45	55.31	63.69	63.87
Female	29.89	37.55	44.69	36.31	36.13
ALL AGES	100.00	100.00	100.00	100.00	100.00
24 and under	13.70	11.72	10.18	12.05	12.15
25-34	31.77	32.77	31.14	31.52	31.82
35-44	23.60	22.71	25.32	22.61	23.55
45-54	14.59	17.10	17.51	17.65	16.42
55-64	15.41	14.69	14.31	15.43	15.31
65 and over	0.92	1.01	1.53	0.74	1.04
ALL INDUSTRIES	100.00	100.00	100.00	100.00	100.00
Manufacturing	36.66	40.07	36.01	35.86	37.16
Durable Goods	21.59	21.12	19.24	19.79	20.62
Nondurable Goods	15.07	18.95	16.77	16.07	16.55
Nonmanufacturing	63.34	59.93	63.99	64.14	62.84
Mining	2.95	3.04	2.90	2.35	2.84
Construction	20.52	15.40	12.21	16.60	16.76
Trans. & Publ. Util.	3.63	4.38	6.78	3.36	4.42
Wholesale & Ret. Trade	13.99	15.42	16.89	16.14	15.38
Fin.,Ins.,& Real Est.	2.43	2.63	3.88	3.49	3.00
Service & Misc. 1/	19.82	19.06	21.33	22.20	20.45
ALL OCCUPATIONS	100.00	100.00	100.00	100.00	100.00
Prof.,Tech.,& Mgr.	9.76	11.46	12.33	11.98	11.16
Clerical	9.80	11.26	15.10	12.42	11.80
Sales	4.85	4.95	4.70	5.19	4.91
Service	7.72	8.57	9.20	10.54	8.81
Farm.,Fish.,& For.	2.65	1.51	0.84	1.08	1.68
Processing	7.12	6.31	5.83	6.09	6.45
Machine Trades	9.26	10.60	9.15	8.49	9.39
Bench Work	10.90	11.38	10.66	11.68	11.12
Structural Work	26.94	21.00	17.52	21.50	22.44
Miscellaneous	11.01	12.97	14.67	11.04	12.25

1/ Includes Service, Government, and Miscellaneous Manufacturing.

SOURCE: Bureau of Research and Statistics, Pennsylvania Dept. of Labor and Industry

TABLE 42
RANKS BY UNEMPLOYMENT RATES FOR PENNSYLVANIA LABOR MARKET AREAS 1/
ANNUAL AVERAGES FOR 1986 AND 1987

AREAS	ANNUAL AVERAGE 1987 RANK	RATE	VOLUME OF UNEMP.	AREAS	ANNUAL AVERAGE 1986 RANK	RATE	VOLUME OF UNEMP.
WAYNESBURG LMA	1	13.2	1.7	WAYNESBURG LMA	1	12.2	1.7
BEAVER COUNTY PMSA	2	9.6	6.1	BEAVER COUNTY PMSA	2	11.9	7.6
HUNTINGDON LMA	2	9.6	1.7	HUNTINGDON LMA	3	10.9	1.9
CLARION LMA	4	9.5	1.6	INDIANA LMA	4	10.8	3.6
KITTANNING-FORD CITY LMA	4	9.5	2.6	BEDFORD LMA	5	10.6	2.1
INDIANA LMA	6	9.3	3.3	DUBOIS-PUNXSUTAWNEY LMA	6	10.5	5.8
DUBOIS-PUNXSUTAWNEY LMA	7	9.2	5.0	KITTANNING-FORD CITY LMA	7	10.2	3.0
LOCK HAVEN-RENOVO LMA	8	9.0	1.4	MEADVILLE LMA	8	10.1	3.9
JOHNSTOWN MSA	9	8.3	7.8	JOHNSTOWN MSA	9	10.0	9.4
MEADVILLE LMA	10	8.1	3.1	CLARION LMA	10	9.9	1.7
OIL CITY LMA	10	8.1	2.2	LEWISTOWN LMA	11	9.5	2.8
BEDFORD LMA	12	8.0	1.6	OIL CITY LMA	12	9.2	2.6
LEWISTOWN LMA	13	7.8	2.3	BRADFORD LMA	13	9.1	1.9
BRADFORD LMA	14	7.5	1.6	POTTSVILLE LMA	13	9.1	6.5
ALTOONA MSA	15	7.2	4.2	ST. MARYS-EMPORIUM LMA	15	9.0	1.7
ERIE MSA	15	7.2	9.2	COUDERSPORT LMA	16	8.9	0.7
POTTSVILLE LMA	17	7.1	5.1	ALTOONA MSA	17	8.5	5.0
FOREST CITY-MONTROSE LMA	18	7.0	1.2	SCRANTON--WILKES-BARRE MSA	18	8.4	29.1
SCRANTON--WILKES-BARRE MSA	19	6.9	24.1	ERIE MSA	19	8.3	10.6
ST. MARYS-EMPORIUM LMA	19	6.9	1.3	SHARON MSA	20	8.2	4.0
COUDERSPORT LMA	21	6.8	0.5	FOREST CITY-MONTROSE LMA	21	8.1	1.4
PITTSBURGH PMSA	22	6.7	63.4	WARREN LMA	21	8.1	1.8
SHARON MSA	22	6.7	3.3	WELLSBORO LMA	21	8.1	1.4
NEW CASTLE LMA	24	6.6	2.9	LOCK HAVEN-RENOVO LMA	24	8.0	1.3
BUTLER LMA	25	6.5	4.4	BUTLER LMA	25	7.9	5.3
WELLSBORO LMA	26	6.4	1.1	NEW CASTLE LMA	25	7.9	3.6
WARREN LMA	27	6.3	1.3	SUNBURY-SHAMOKIN-MT. CARMEL LMA	27	7.8	6.8
SUNBURY-SHAMOKIN-MT. CARMEL LMA	28	6.2	5.4	PITTSBURGH PMSA	28	7.7	74.0
UNITED STATES		6.2	7425.0	WILLIAMSPORT MSA	29	7.3	4.1
PENNSYLVANIA		5.7	320.0	ALLENTOWN-BETHLEHEM MSA	30	7.2	23.1
SAYRE-ATHENS-TOWANDA LMA	29	5.6	1.6	UNITED STATES		7.0	8237.0
WILLIAMSPORT MSA	29	5.6	3.2	HONESDALE-MATAMORAS LMA	31	6.8	1.9
STATE COLLEGE MSA	31	5.5	3.3	PENNSYLVANIA		6.8	386.0
HONESDALE-MATAMORAS LMA	32	5.3	1.6	CHAMBERSBURG-WAYNESBORO LMA	32	6.7	4.0
CHAMBERSBURG-WAYNESBORO LMA	33	5.1	3.0	SAYRE-ATHENS-TOWANDA LMA	33	6.6	1.9
ALLENTOWN-BETHLEHEM MSA	34	5.0	16.0	DUSHORE-LAPORTE LMA	34	6.5	0.2
READING MSA	35	4.9	8.3	READING MSA	35	6.4	10.9
DUSHORE-LAPORTE LMA	36	4.7	0.1	STATE COLLEGE MSA	36	6.3	3.7
YORK MSA	37	4.6	9.5	YORK MSA	37	5.8	11.9
PHILADELPHIA PMSA	38	4.4	105.3	PHILADELPHIA PMSA	38	5.4	127.0
HARRISBURG-LEBANON-CARLISLE MSA	39	4.1	12.8	HARRISBURG-LEBANON-CARLISLE MSA	39	5.0	15.3
LANCASTER MSA	40	3.8	8.1	LANCASTER MSA	40	4.2	8.7

1/ All data are on 1987 benchmarks.
Rates are computed using unrounded data.
U.S. and Pennsylvania included for comparative purposes.
SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 43

PENNSYLVANIA LABOR SURPLUS AREAS
ELIGIBLE FOR FEDERAL PROCUREMENT PREFERENCE
FROM OCTOBER 1, 1988 THROUGH SEPTEMBER 30, 1989

Counties

Armstrong County	Elk County	Juniata County
Beaver County	Fayette County	McKean County
Bedford County	Forest County	Mifflin County
Carbon County	Fulton County	Northumberland County
Clarion County	Greene County	Schuylkill County
Clearfield County	Huntingdon County	Somerset County
Clinton County	Indiana County	Venango County
Crawford County	Jefferson County	Washington County

Balance of Counties

Balance of Cambria County	-	Cambria County less Johnstown City
Balance of Erie County	-	Erie County less Erie City and Millcreek Township
Balance of Luzerne County	-	Luzerne County less Hazleton and Wilkes-Barre Cities
Balance of Westmoreland County	-	Westmoreland County less Hempfield and North Huntingdon Townships

Cities and Townships

Hazleton City	-	in Luzerne County
Johnstown City	-	in Cambria County
McKeesport City	-	in Allegheny County
North Huntington Township	-	in Westmoreland County
Reading City	-	in Berks County
West Mifflin Borough	-	in Allegheny County
Wilkes-Barre City	-	in Luzerne County

The above areas have been classified by the U.S. Department of Labor as labor surplus areas for purposes of Defense Manpower Policy No. 4B (DMP-4B) and Executive Order 12073 and 10582 (implementing the Buy American Act). Employers in such designated areas are eligible for preference in bidding on Federal procurement contracts under these Acts or Orders.

To be classified as a labor surplus area a city or township must have (1) a population of 25,000 or more in the 1980 Census or in any offical annual updates of census estimates and (2) have an unemployment rate of 1.2 times the national average during the reference period. Counties or balance of counties (counties less areas of 25,000 population), regardless of population size, that have unemployment rates of 1.2 times the national average during the reference period are also classified as labor surplus areas. If 1.2 times the national average during the reference period is 10.0% or greater, an area whose unemployment rate is 10.0% or greater during the same period will be classified as a labor surplus area. The reference period is determined by the U.S. Department of Labor, Employment and Training Administration and currently is January 1986 through December 1987.

An area can also be classified as a labor surplus area due to exceptional circumstances if the area experiences a significant rise in its unemployment rate that reaches 1.2 times the current national unemployment rate. This rise in the unemployment rate should be expected to last at least one year and to stay at a level high enough to meet the eligibility criteria under which the area was classified.

SOURCE: Area Trends in Employment and Unemployment, U.S. Department of Labor, Employment and Training Administration, October, 1988.

VII. POPULATIONS WITH SPECIAL EMPLOYABILITY PROBLEMS

A comprehensive analysis of labor market information would be incomplete without some identification of those individuals who encounter barriers to employment. Providing employment and training services to these groups seems particularly appropriate as a means to strengthen their labor force attachment and thus improve their employability. Table 44 is provided to identify these populations with special employability problems. Since tabular data and accompanying definitions are presented as single data items, further analysis will be left to the reader.

Economically disadvantaged persons who are receiving public assistance comprise the largest group of low income persons. The size of this population is detailed by county in Table 45. As of March 1988 there were 704,786 persons dependent on public assistance statewide, a decrease of 34,761 from the March 1987 figure of 739,547. The most current number represents 5.9 percent of the population. There were 542,331 persons receiving Aid to Families with Dependent Children (AFDC), plus 159,705 persons on General Assistance. Of the number dependent on public assistance, 180,000 have been estimated to be employable, a primary target group that the Job Training Partnership Act addresses. The majority of persons on welfare are not considered to be able to work because of age, physical or mental disability, or family responsibilities.

Counties having the highest percentage of their population on public assistance were Philadelphia with 15.7 percent; Fayette, 13.2 percent, and Greene, 11.2 percent. Cumberland County's 1.0 percent was the lowest county percentage of persons on public assistance. Montgomery and Pike Counties were the next lowest with 1.3 percent.

The U.S. Office of Management and Budget sets annual income levels to define poverty in the United States. These income criteria are given in Table 46. A family of four whose annual income is below $11,650 is considered to be living in poverty. A person is classified as economically disadvantaged if he is a member of a family receiving cash welfare payments, or has a family income below the national poverty level or below 70 percent of the Lower Living Standard Income Level (LLSIL) set by the U.S. Employment and Training Administration, whichever is higher. The poverty level criterion is uniform throughout the continental United States, but the LLSIL varies for individual states and major metropolitan areas. For the Philadelphia PMSA, the LLSIL for a family of four is $19,510 while the comparable figure for the Pittsburgh PMSA is $18,800. For the balance of Pennsylvania, the comparable figures for Metropolitan and Non-Metropolitan Areas are $19,790 and $19,130, respectively.

Data in Table 46 were prepared by the U.S. Office of Management and Budget and the U.S. Bureau of Labor Statistics.

TABLE 44

PENNSYLVANIA

POPULATIONS WITH SPECIAL EMPLOYABILITY PROBLEMS

Economically Disadvantaged, Total (1986) 1/	2,002,400
16-21 years of age	250,400
22-54 years of age	730,500
55+ years of age	349,700
Dislocated Workers (1987 Annual Average) 1/	98,150
Persons 16-64 With a Work Disability (1980 Census)	642,761
Male	328,524
Female	314,237
High School Dropouts (1986-87 School Year) 2/	21,190
Teenage Mothers (1987) 3/	34,780
Displaced Homemakers (1986) 1/	324,000
Single Parents (1980 Census)	253,947
Male	34,040
Female	219,907
Average Monthly Number of Persons Receiving Cash Welfare Assistance - 1987 4/	719,089
Average Monthly Number of Persons Receiving Aid to Families with Dependent Children (AFDC) - 1987 4/	555,889
Long-Term Unemployed (15+ Weeks) - 1987 1/	87,000
1986 Unemployment Rate (All Persons)	5.7%
1986 Unemployment Rate (Long-Term)	1.5%
Long-Term as a Percentage of Total Unemployed	27.2%

See definitions on next page.

1/ SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

2/ SOURCE: Public School Dropout Report 1986-87, Pennsylvania Department of Education.

3/ SOURCE: Pennsylvania Department of Health.

4/ SOURCE: Cash Assistance Statistics, Pennsylvania Department of Public Welfare.

TABLE 44

PENNSYLVANIA

POPULATIONS WITH SPECIAL EMPLOYABILITY PROBLEMS

DEFINITIONS

ECONOMICALLY DISADVANTAGED PERSON - A member of a family that receives cash welfare payments or whose family income does not exceed the poverty level or exceed 70 percent of the lower living standard income level, whichever is higher.

DISLOCATED WORKER - A person who has been, or will soon be, terminated or laid-off from employment and is unlikely to return to his/her previous industry or occupation; or, if currently employed, earns a rate not greater than one-half of their previous hourly rate, but less than $4.50 per hour.

PERSON WITH A WORK DISABILITY - A person who has a physical, mental, or other health condition which has lasted for six months or more.

HIGH SCHOOL DROPOUTS - Students who fall into 1 of 4 categories:
Left school after passing required attendance age;
Left after issued a General Employment Certificate;
Left after issued a Farm or Domestic Service Exemption Permit;
Left after being committed to a correctional institution.

TEENAGE MOTHERS - Mother under age 20.

DISPLACED HOMEMAKER - An individual who (a) has not worked in the labor force for a number of years but has, during those years, worked in the home providing unpaid services for family members; (b) has had the source for the income that supported the family removed; and (c) is experiencing difficulty obtaining or upgrading employment.

PERSONS RECEIVING CASH ASSISTANCE - Persons who receive monetary aide under AFDC, General Assistance, or other cash subsistence programs operated through the Department of Public Welfare.

LONG-TERM UNEMPLOYED - Persons unemployed for 15 weeks and over.

TABLE 45

ECONOMICALLY DISADVANTAGED ON PUBLIC ASSISTANCE
BY SELECTED CATEGORIES AND BY COUNTY

MARCH 1988

COUNTY	Persons Dependent on Public Assistance	% of Population 1/	Aid to Families with Dependent Children		General Assistance		Estimated Number Employable 2/
			Number of Persons	Number of Cases	Number of Persons	Number of Cases	
Adams	1,175	1.6	869	314	297	234	235
Allegheny	92,942	6.8	70,260	24,273	22,318	19,519	24,380
Armstrong	4,894	6.2	3,439	1,116	1,436	1,068	2,010
Beaver	14,071	7.4	10,844	3,610	3,162	2,654	3,139
Bedford	1,881	3.9	1,385	453	482	361	813
Berks	11,104	3.4	9,206	2,977	1,817	1,626	2,639
Blair	8,207	6.2	5,973	2,029	2,198	1,592	2,473
Bradford	3,665	5.7	2,593	875	1,056	675	1,515
Bucks	7,638	1.4	5,983	2,173	1,602	1,401	1,346
Butler	5,551	3.6	4,134	1,369	1,396	1,090	2,169
Cambria	9,470	5.5	6,977	2,246	2,453	1,832	3,178
Cameron	321	5.1	215	77	104	84	182
Carbon	1,649	3.0	1,183	435	452	333	818
Centre	2,310	2.0	1,608	569	682	568	1,437
Chester	6,416	1.9	5,127	1,814	1,260	1,093	1,393
Clarion	2,616	6.3	1,974	611	629	484	1,421
Clearfield	4,754	5.8	3,367	1,069	1,365	1,000	3,902
Clinton	2,354	6.2	1,805	630	533	429	1,374
Columbia	1,755	2.9	1,314	458	423	343	546
Crawford	5,758	6.7	4,370	1,409	1,366	1,093	2,432
Cumberland	1,828	1.0	1,363	508	436	367	1,664
Dauphin	12,828	5.4	10,408	3,446	2,379	1,878	2,089
Delaware	19,678	3.5	15,410	5,125	4,191	3,667	4,778
Elk	1,511	4.0	1,119	373	379	282	1,049
Erie	20,300	7.3	15,695	4,949	4,483	3,380	2,758
Fayette	20,212	13.2	15,260	4,678	4,906	3,619	8,474
Forest	235	5.0	127	45	107	71	110
Franklin	2,730	2.3	2,089	719	616	517	1,031
Fulton	605	4.3	402	138	200	132	116
Greene	4,518	11.2	3,209	960	1,302	870	1,958
Huntingdon	1,974	4.6	1,484	490	475	357	1,017
Indiana	4,624	5.0	3,228	1,020	1,378	965	1,881
Jefferson	2,374	4.9	1,774	582	594	416	900
Juniata	396	2.0	299	111	89	73	275
Lackawanna	9,728	4.4	7,657	2,564	1,919	1,603	1,577
Lancaster	11,342	2.8	9,005	2,959	2,299	1,832	954
Lawrence	7,668	7.6	5,619	1,813	2,010	1,503	1,069
Lebanon	2,362	2.1	1,757	628	597	459	957
Lehigh	9,799	3.4	7,765	2,578	1,974	1,509	2,331
Luzerne	16,018	4.8	12,810	4,229	3,121	2,753	6,311
Lycoming	6,057	5.2	4,425	1,520	1,594	1,314	1,276
McKean	3,397	7.3	2,485	794	891	678	813
Mercer	7,874	6.4	5,966	2,028	1,876	1,443	2,745
Mifflin	2,236	4.8	1,646	577	578	448	674
Monroe	1,321	1.5	1,080	413	223	211	372
Montgomery	8,526	1.3	6,461	2,337	1,984	1,799	1,997
Montour	455	2.7	324	114	125	99	132
Northampton	6,563	2.7	5,280	1,818	1,237	1,023	1,995
Northumberland	3,294	3.3	2,410	863	855	635	740
Perry	1,092	2.7	835	297	251	204	321
Philadelphia	258,938	15.7	203,223	66,904	55,346	45,784	51,260
Pike	307	1.3	209	80	94	69	109
Potter	1,174	6.6	826	258	335	219	495
Schuylkill	4,637	3.0	3,540	1,221	1,045	783	1,421
Snyder	627	1.8	496	177	128	94	242
Somerset	4,003	5.0	3,160	970	819	644	1,767
Sullivan	107	1.7	84	29	23	23	153
Susquehanna	1,240	3.1	994	338	225	167	610
Tioga	1,993	4.9	1,365	444	621	353	704
Union	750	2.2	621	210	125	97	216
Venango	4,471	7.2	3,364	1,075	1,096	827	1,391
Warren	2,140	4.7	1,578	513	540	420	940
Washington	13,369	6.3	9,941	3,328	3,367	2,719	2,561
Wayne	934	2.4	762	256	152	131	249
Westmoreland	20,183	5.3	14,373	4,787	5,683	4,322	5,083
Wyoming	1,179	4.2	889	318	283	223	474
York	8,658	2.6	6,888	2,363	1,723	1,449	2,556
PENNSYLVANIA	704,786	5.9	542,331	180,454	159,705	129,910	180,000

See footnotes on next page.

TABLE 45

ECONOMICALLY DISADVANTAGED ON PUBLIC ASSISTANCE
BY SELECTED CATEGORIES AND BY COUNTY

FOOTNOTES

1/ Based on Bureau of the Census Estimates for July 1, 1987. The state total is 11,936,400.

2/ Source of the statewide total is the Pennsylvania Department of Welfare. County distribution is based upon counts of applicants registered with the Pennsylvania Department of Labor and Industry's Bureau of Job Service who indicated an association with welfare.

NOTE: Obviously one case could include several persons, e.g. one AFDC case could include a head of household and several children.

SOURCE: Public Assistance data are provided by the Pennsylvania Department of Public Welfare.

TABLE 46

U.S. OFFICE OF MANAGEMENT AND BUDGET
ANNUAL INCOME AND POVERTY LEVEL CRITERIA FOR CONTINENTAL U.S.

FAMILY SIZE	Effective Date			
	Feb 1988	April 1987	April 1986	April 1985
1	$ 5,700	$ 5,500	$ 5,360	$ 5,250
2	7,730	7,400	7,240	7,050
3	9,690	9,300	9,120	8,850
4	11,650	11,200	11,000	10,650
5	13,610	13,100	12,880	12,450
6	15,570	15,000	14,760	14,250
7	17,530	16,900	16,640	16,050
8	19,490	18,800	18,520	17,850
EACH ADDITIONAL MEMBER	1,960	1,900	1,880	1,800

U.S. EMPLOYMENT AND TRAINING ADMINISTRATION
1988 LOWER LIVING STANDARD INCOME LEVEL

FAMILY SIZE	Philadelphia PMSA		Pittsburgh PMSA	
	100%	70%	100%	70%
1	$ 7,030	$ 4,920	$ 6,770	$ 4,740
2	11,510	8,060	11,090	7,760
3	15,800	11,060	15,230	10,660
4	19,510	13,660	18,800	13,160
5	23,030	16,120	22,190	15,530
6	26,930	18,850	25,940	18,160
7	30,830	21,580	29,700	20,790
8	34,730	24,310	33,460	23,420
EACH ADDITIONAL MEMBER	3,900	2,730	3,760	2,630

Balance of Pennsylvania

FAMILY SIZE	Metropolitan Area		Non-Metropolitan Area	
	100%	70%	100%	70%
1	$ 7,030	$ 4,990	$ 6,890	$ 4,820
2	11,670	8,170	11,290	7,900
3	16,030	11,220	15,500	10,850
4	19,790	13,850	19,130	13,390
5	23,340	16,340	22,570	15,800
6	27,300	19,110	26,400	18,480
7	31,260	21,880	30,230	21,160
8	35,210	24,650	34,060	23,840
EACH ADDITIONAL MEMBER	3,960	2,770	3,830	2,680

SOURCE: Federal Register, May, 1988, U.S. Department of Labor

VIII. APPENDIX

A. Concepts and Definitions

Applicants - Persons registered at the local employment service offices and are reasonably representative of the available worker supply in most occupational categories and for most sections of the state. These jobseekers comprise an estimated 70 percent of all workers in the area suffering a spell of unemployment each year, as well as labor force entrants and currently employed workers seeking a job change.

Average Hourly Earnings - The total money earnings for each hour worked or paid for including not only basic hourly and incentive wages, but also premium pay for overtime and late shift work.

Average Weekly Earnings - Amount computed by multiplying average hourly earnings by average weekly hours worked.

Civilian Labor Force - The sum of persons 16 years of age and older who are employed (exclusive of the Armed Forces), unemployed, or directly involved in labor-management disputes.

Dislocated Workers - Those individuals in the labor force who have been laid off and are not likely to return to their previous jobs. Individuals who have dropped out of the labor force, i.e., not actively seeking work, are not counted as dislocated workers.

Durable Goods - Goods also known as "hard goods", refer to manufactured or processed items generally considered to have a normal life expectancy of three years of more. The durable goods manufacturing industries are lumber and wood, furniture, stone, clay, glass, primary and fabricated metals, electrical and non-electrical machinery, transportation equipment, instruments and miscellaneous manufacturing.

Economically Disadvantaged Person - A member of a family that receives cash welfare payments or whose family annual income does not exceed the poverty level or exceed 70 percent of the lower living standard income, whichever is higher.

ESARS - Acronym for Employment Security Automated Reporting System for reporting and compiling characteristics of job applicants and job orders and activities performed by Employment Service offices.

Hispanic - Persons of Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin.

Job Bank - The Job Bank is a computerized listing of the job openings placed by employers with OES. The listings come both alphabetically and by D.O.T. code. This service is provided at no cost to either employers or applicants. In addition to computer

printouts, most OES local offices are equipped with film readers to assist applicants in locating a job for which they are qualified. An ES Specialist will interview the applicant, and if the applicant is qualified, phone the employer to arrange for an interview. This is the referral process and, if the applicant is hired, it is a placement.

Job Training Partnership Act (JTPA) - The Act that replaced the Comprehensive Employment and Training Act (CETA). JTPA seeks to train disadvantaged groups in marketable skills. Target groups can include: economically disadvantaged, physically handicapped, school dropouts, long-term dislocated workers unemployed, and teen parents.

Labor Market Area (LMA) - Defined as a county or group of counties having a central city without regard to population size. A labor market area is an economically integrated unit within which workers may readily change jobs without changing their place of residence. The area generally takes the name of the central city. The boundaries depend primarily on economic and geographic factors, and not on political jurisdiction. MSAs are literally large labor market areas.

Metropolitan Statistical Area (MSA), (PMSA) - MSAs and PMSAs are relatively large labor market areas. They are defined as a county containing either a city with a population of at least 50,000 or a U.S. Bureau of Census designated urbanized area of at least 50,000. The labor market concept takes into consideration the total local area where job transactions occur, e.g., persons residing in the labor market area can obtain employment anywhere in the area without changing their place of residence.

Minority - Those persons who are non-white, of Spanish heritage or have other characteristics which pose a barrier to employment.

Nonagricultural Wage and Salary Employment - State nonagricultural wage and salary employment statistics are based primarily on survey data collected from a sample of employers, representing 64 percent of employment in the state's manufacturing industries and 38 percent in nonmanufacturing industries.

Nonagricultural wage and salary employment refers only to employes on establishment payrolls during the sample week in each month (week including the 12th), and excludes the self-employed, unpaid family workers, domestic workers and agricultural workers, but includes workers involved in labor-management disputes. Nonagricultural wage and salary employment figures relate to place of work of the workers and not to their place of residence. To the extent that multiple job holding exists during the payroll period, the payroll records may count a person more than once. In addition, the payroll data include commuters who live outside the state, but not persons who commute to work outside the state.

Nondurable Goods - Known as "soft goods", refer to manufactured or processed items generally considered to last for a short time - less than three years. The nondurable manufacturing industries include food, tobacco, textiles, apparel, paper, printing, chemicals, petroleum, rubber and leather.

Not in Labor Force - If a person is not working, not looking for work, not involved in a labor-management dispute, and not on unpaid absence from a job, or if he is under age 16, then the person is not in the labor force. Housewives, students, retirees, and children constitute the largest body of persons not in the labor force. Welfare recipients, if neither looking for work nor holding a job, are not in the labor force. Persons who may wish to work, but because of disability cannot work, are also not in the labor force.

Per Capita Income - Total income of an area divided by total population of that area.

Personal Income - All current income before taxes but excluding personal contributions for social security insurance.

Placement - When the local employment service office, which has an employer job order, refers an acceptable applicant to the employer, and verifies the fact that the applicant has been hired by the employer.

Private Industry Council (PIC) - Councils, composed of local business people and corporation officials, and formed to develop and control JTPA programs.

Seasonally Adjusted Data - Data which excludes the effects of seasonal variations. Economic time series are generally subject to regular intra-yearly movements comprised of social customs, production changes, and climatic conditions which tend to repeat themselves annually in a given locality, i.e., graduating students in June or increased retail employment in December. When a ratio-to-moving-average method (developed by the U.S. Department of Labor) is used to remove seasonal influences, a reliable trend is obtained for analysis.

Seasonal Employment - Employment that is affected by climatic conditions, social customs and/or production changes.

Service Delivery Area (SDA) - A designated geographic area instituted under JTPA, to assist in the administration and management of the JTPA programs.

Unemployment - State unemployment statistics are obtained as part of the National Current Population Survey (CPS). This is a monthly survey of about 71,000 households throughout the Nation of which 3,100 are in Pennsylvania. It is conducted by the U.S. Bureau of Census for the U.S. Department of Labor.

Unemployed Persons - Persons who did not work during the survey week, who made specific efforts to find a job within the past four weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who did not work at all, were available for work, and (a) were waiting to be called back to a job from which they had been laid off; or (b) were waiting to report to a new wage or salary job within 30 days.

Unemployment Rate - The number of unemployed as a percent of the total civilian labor force. The rate is based on unrounded data although rounded data may be published.

Vietnam-Era Veteran - A person who (1) served on active duty for a period of more than 180 days, any part of which occurred during the Vietnam-Era (August 5, 1964 through May 7, 1975), and was discharged or released therefrom with other than a dishonorable discharge, or (2) was discharged or released from active duty due to a service-connected disability if any part of such active duty was performed during the Vietnam Era.

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